

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

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## Manufacturers' Record.

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BALTIMORE, SEPTEMBER 7, 1905.

The Manufacturers' Record has  
opened an office in New York at 52  
Broadway.

### FEVER OF SOUTHERN PROSPERITY EPIDEMIC.

What an inspiring prospect the future holds out for business activity! In all our history there was never before a time when everything was as favorable as today for guaranteeing a really marvelous expansion of business. Today the farmers of all sections are prosperous, and not only practically free from debt, but as a class, having large accumulated earnings, they enter the new crop year with the assurance of the largest aggregate grain and grass crops ever produced, commanding a good price, with an equal assurance that the cotton crop, which in value will rank as one of the best ever sold, giving to Southern farmers for this staple alone \$600,000,000 or more. The farmers are indeed having their fat years, and in the abundance of the present they can only be thankful that the lean years are so far behind as to be almost forgotten.

Coincident with this agricultural wealth is the greatest expansion ever known in iron and steel. Cotton manufacturing and lumbering interests vie with iron and steel in prosperity. Railroads are crowded to the limit of their capacity, and new rolling stock and thousands of miles of new lines are needed to meet the pressing demand for transportation. Railroad earnings are increasing at such a rate that new records are being made every month. Wherever one turns the same conditions prevail. In the coal and iron sections of the South there is a great rush of business and investment, and anyone studying the coal regions of West Virginia, Kentucky, Tennessee, Virginia and Alabama might be justified in imagining that here, indeed, is center-

ing the broadest possible development of the South, and in contemplating this one might be excused for forgetting that North Carolina alone is developing at the present time water-powers which in the aggregate will rival that at Niagara; that towns scarcely known of a few years ago are becoming active industrial centers; that new railroads developing in Eastern Carolina and Virginia will spend from \$5,000,000 to \$10,000,000 in the building, equipment and purchase of established lines and timber properties, in the enlargement of present operations and in the development of facilities for export trade. And the North Carolinian studying these conditions might be excused if he almost forget that across the line in South Carolina and Georgia there is almost equal, if not equal prosperity. And when we turn from the central South to the Southwest, Texas and Oklahoma and Indian Territory and Southern Missouri all send up tales of activity, of the incoming of new settlers, of heavy investments and new enterprises, of new and more costly dwellings, of new and larger factory and office buildings, of new railroads, and everywhere throughout that region come stories of a hum of prosperity which would make one think that there, indeed, was the great center of Southern activity if you had not heard of North Carolina and Virginia and Kentucky and Tennessee and Alabama.

Talk about yellow fever, the real great fever which is spreading all over the South—the fever ten times more active than yellow fever—is the fever of industrial expansion and business prosperity. But it is a healthy fever. It is one which is stirring the blood and quickening the pulse of the whole South, and one which brings no languor in its wake; for it is free from any boom or speculative tendencies.

But in thinking of the prosperity of the South we must not forget that this prosperity is by no means confined to this section. It spreads from the Atlantic to the Pacific, from the Lakes to the Rio Grande. Nor is it confined alone to the United States. Canada and Mexico are giving us a lively race in industrial activity, and when we look out over the broad world we see no signs of industrial depression, but, on the contrary, many signs of industrial advancement everywhere. In Germany, in England, in France there is a steady improvement in the business outlook, and when we turn to the Orient we find a condition which baffles all human calculation, and the study of which opens up a glimpse of possibilities beyond our ability to fully grasp.

It is indeed an inspiring study to take a survey of the world's business outlook just now. No living man has ever seen such a condition, and he who is fortunate enough to live for 10 or 20 years longer will see an advancement so wonderful that no man would today dare attempt to forecast; for however conservative he might be, the picture which he would be compelled to draw

of the coming years would be regarded as but the wild dream of a visionary enthusiast. Fortunate, indeed, is the man who has before him the opportunity of being an active factor in the progress of the next 10 or 20 years.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 80, 81 and 82.

### CALLING FOR WORKERS.

Mr. Thomas M. Ferguson of Hattiesburg, Miss., writing to the MANUFACTURERS' RECORD of the completion of the sewerage system in his city, says that so many connections with the system have to be made that eight or ten good, sober plumbers may find employment there at good wages, as the resident plumbers are so crowded with work that they cannot keep up with orders. This demand at Hattiesburg reflects a situation quite common throughout the South. In half a dozen localities cotton mills are advertising for spinners, doffers, spoolers and weavers or are trying to devise means to draw from their mountain isolation some of the thousands of whites who have not yet taken the opportunity to engage in productive industry. For several months a cigar factory at Greenville, S. C., has been short of labor, and now wants 500 young women to operate the easily-running machines. The South & Western Railroad Co. has 1200 men at work grading in Western North Carolina, but can give employment to 4000 more. The 2500 laborers in the phosphate industry around Mt. Pleasant, Tenn., are only about half the number for whom there is work there. Gadsden, Ala., has a scarcity of labor, and 1000 men could find work there in the steel plants, furnaces, pipe shops, etc., while there is a demand for 500 more at Ensley.

These are bits of information picked up at random from Southern newspapers during the past few weeks indicating the stringency in the labor market in the South on various lines. With cotton-picking under full swing over a large area the stringency is likely to be intensified. This demonstrates that the natural sources of wealth in the South are so vast that population there cannot increase by nature rapidly enough to develop them to meet the demands of the country. The shortage is not confined to any one field, but affects the furnace, the mine, the forest and the farmer alike. The opportunities in the South for work, both skilled and unskilled, are so great that there is no occasion for idleness on the part of natives of the South, and at the same time there is a wonderful chance for those of thrifty workers from other parts of the country.

W. H. Burris of the Interstate Realty Co., Memphis, Tenn., writes to the MANUFACTURERS' RECORD as follows:

We received the copy of the MANUFACTURERS' RECORD containing our advertisement

on Sunday, August 27, and at the same time we had an inquiry from North Carolina about the property we advertised in that issue. This breaks the record for quick results.

### INSPIRATION FOR SOUTHERN WORKERS.

Facts of the remarkable public career of Joseph Emerson Brown of Georgia, for four successive terms Governor of the State, a State Senator, a Judge of its Superior Court, a Chief Justice of its Supreme Court and twice its representative in the Senate of the United States, are household property of Georgians and belong to the treasury of American greatness. The reasons of those facts, however, are not so generally known, and therefore there is especial timeliness in the publication in permanent and attractive pamphlet form of the baccalaureate address on the life and times of the Southern statesman made by Judge Emory Speer at the commencement of Mercer University, Macon, Ga. For the address, while valuable as a record of the unique fortunes of the great Georgian, is much more valuable as bringing to the attention of the rising generation and emphasizing the foundations of pluck, self-respect and self-reliance upon which those fortunes rose. Judge Speer, after tracing the ancestry of Joe Brown to that highland stock of the South which has begotten so much of American greatness and is yet to beget other, gives one pictures of the boy developing those traits which guarantee the real success of a man whether in public or private life. Joe is shown in his boyhood cultivating with a pair of bull calves a little scrap of hillside land and hauling to town every Saturday potatoes, cabbages, lightwood, etc., to purchase something for the family. Excelling in manly sports, he deems it not undignified to lighten the labors of his mother by working at the spinning wheel on rainy days. At 18 years of age he drives his working capital, the bull calves, now steers, through the mountains to South Carolina and sells them for five months' board while he obtains credit for schooling at a South Carolina academy. At the end of that time, by teaching school for three months in his home community, he makes enough money to pay his tuition debt and to continue his studies, which, under the circumstances, it is needless to say, are pursued with the avidity of one naturally alert-minded and fully aware of the value of things for which one has to work. At the age of 22, in debt for his education, he successfully teaches an academy of his own, paying for his board by acting as tutor for the children of a friend, making enough money in a year to wipe out all his debts and gaining enough time of evenings and on holidays to fit himself for admission to the bar. Such an one was gilt-edged educational security of himself, and with little difficulty he borrowed in 1845 the money necessary to carry him through the law school of

Yale College, where he mastered the two years' course in one year.

These early struggles, which have memorial in a fund established by Governor Brown to aid needy students by loans, are sympathetically described by Judge Speer in a way that appeals to the healthy imagination and which creates a strong desire that such an address might be the feature of the commencement of every educational institution in the South and in its printed form might be read by every Southern boy. It is more than mere biography, contributing as true biography should do to the material for the real history of the country. In the midst of erratic strayings from the well-tried paths of the fathers in education, it comes as a warning and as an inspiration. From many quarters arise complaints that American manhood is deteriorating, and correction of this evil is sought in the working out of new-fangled educational theories promoted now by mistaken zeal, now by brazen charlatanry. Because economic and social conditions have changed, the new education, sometimes called "democratization," acts apparently upon the presumption that human fundamentals have changed, and that therefore the training of men to successful careers must be directed upon novel lines seeking to adjust artificially man to new circumstances rather than to prepare him to bend to his purpose circumstances, of whatever character, as they may arise. The modern methods too often disregard or tend to dwarf the elemental quality of reliance upon one's self, and instead of strengthening native abilities for contest with any conditions, point to outside aid and dependence upon others. The results can only be paralysis of initiative, pauperism of spirit and the making a man a victim instead of the victor of circumstances.

It is still possible for many a youth to have a life similar to that of Joseph Emerson Brown of Georgia. He was only one of thousands of Americans whose right education was the important factor in the making of America. Their success was not their measure, but they were the measure of their success. Their duplicates are to be assured only in a duplication of their training, and that duplication is to be had primarily in a minimizing of the latter-day heresy that institutions of learning are to be gauged by the amount of their endowments of money rather than by the character of the men they give to society. Against this heresy a few fearless voices have been raised unappalled by the clatter-clatter of the "educational" mob and unaffected by the patronizing, dogmatic pity of "educational" hierarchs. These protesters against "educational" frenzy have faith in the ultimate common-sense of their fellows, and, rejoicing at this picture of success drawn by Judge Speer, rejoice, too, that he has seen fit to quote the words of another great Georgian, Ben Hill:

I had rather be the humblest of those who would save you and perish amid your curses than be the chiefest architect of your ruin and live forever the unworthy recipient of your deluded huzzas.

#### A COTTON GOODS COMMISSION.

Four or five years ago it was suggested that a commission be appointed to devise means for the expansion of the markets for American cotton goods. The project has been revived from time to time, and just at present is receiving endorsement of one kind and another. It may be suggested here and now that such a commission, if it ever eventu-

ates, should be composed of practical cotton manufacturers, if any of them may be induced to take holiday from their task of filling orders for foreign markets in order to enjoy a junket at the expense of the taxpayers of the United States, and that it should not be composed of roving Loomises at large, ex-statesmen frantic to butt in again, journalists still political creditors, or politicians who know too much for the comfort of the powers that be to be left off the national pay-roll. A committee of broad-minded, well-informed manufacturers might possibly learn much by a study on the ground of foreign markets, but it would be worse than folly to send on such a mission men who are not thorough, practical experts in the cotton industry.

#### HARVIE JORDAN.

The meeting at Asheville, N. C., this week of the executive committee of the Southern Cotton Association, with Harvie Jordan president, is in some respects epochal for the South. Nine months ago Harvie Jordan, a Georgian, was known in parts of the South as an active worker, with voice and pen and in a couple of organizations, for the advancement of the material interest of Southern agriculture. No such organization as the Southern Cotton Association existed. But at New Orleans in January last the man and the occasion happily met. An unprecedented growing season had, far beyond the expectations of many persons making special study of the situation, resulted in a record-breaking crop revealed in ginning statistics early in December. The class of city cotton harvesters, who prey alike upon growers and consumers, were prompt seeking to exaggerate, for their own advantage, the slump in prices threatening thousands of cotton-growers with ruin. For a few weeks the outlook was exceedingly gloomy, until the gathering of growers and financiers close to them at New Orleans gave the chance for the laying out of lines for practical intelligent action to meet the emergency and to prevent a recurrence of it.

Even then faint hearts would have counseled inaction or inadequate action. Not so with Harvie Jordan. He knew as well as anybody else present that a half-century had been marked by failures to bring about co-operation on the part of hundreds of thousands of cotton-growers, small and great, for self-protection and for the protection even of their fellows who would not co-operate. He was acquainted with more or less unsuccessful efforts to induce an artificial reduction of acreage after a low-price crop, with the difficulties about carrying cotton for many weeks with which individual growers were confronted, but also with the steady expansion of diversification in agriculture tending to overcome these difficulties by placing the planter and farmer in a position of comparative independence and to bring cotton-growing closer to the businesslike handling basis where supply and demand might be reasonably approximate without resort to makeshifts demoralizing both to producer and to consumer. He had likewise been duly impressed with the plans for financing a crop to the end that the real market might be steadied and the speculative market might be thrown back upon itself. He was not afraid, in the face of opposition on the part of timidity at the vastness of the task, to assert positively and persistently the advantages of associating the results of best

experience in a plan of well-defined action looking not merely to the immediate danger, but to the permanent stability of the great cotton interest affecting for good or ill, directly or indirectly, at least five millions of workers and dependents in the cotton belt and quite as many more in other parts of the country and abroad. The announcement of the plan made possible through the optimistic common-sense of Harvie Jordan had an instant effect for good, and the safe realization of the predictions of results of the Association strengthens mightily the hands of the executive committee at Asheville in its preparations for the perfecting of its work. The thanks for this are primarily due Harvie Jordan. His practical wisdom and unruffled patience in maintaining a point have been signally manifested in the campaign of the Association, through the notable work of Secretary Richard Cheatham, which has uncovered in the face of positive denials and ridicule the outrageous scandal in the national Department of Agriculture, an end fully justifying of itself the organization of the Southern Cotton Association. It has brought Harvie Jordan national and international fame. He deserves it.

#### RECIPROCAL COAL.

A sidelight upon the agitation for "reciprocity" having one of its storm-centers in Boston is supplied through *Industrial Canada* in a discussion of the relation of cheap coal to national progress. It traces the increase in production of the Nova Scotia coal trade since 1878 from 693,511 tons annually to more than 3,000,000 tons, says that the home territory that can possibly be supplied with Nova Scotia coal is fully supplied, and that the question of any expansion in the future of the coal business there rests upon obtaining outside markets. It refers to the efforts of the Dominion Coal Co. in that direction in shipping small quantities of coal to the North of Europe and to Mexico, and says:

The national policy having served its term and fulfilled its purpose in giving our mines our total available home market, the question now arises whether it cannot be safely and advantageously modified in order to give them a profitable outside market and thereby sustain in the future the yearly increase in the output? Cannot the New England market so eagerly coveted in 1878 be advantageously sought in 1905? The conditions have entirely changed in the intervening 27 years, and changed in favor of reciprocity. In 1904 some 35,000 manufacturers and business men in Massachusetts, representing an invested capital of \$150,000,000, endorsed the reciprocity movement, and it is daily gaining strength. New England has neither coal nor iron, and unless she can secure cheap raw materials she must resign her industrial supremacy to Ohio and other more favored regions. Nova Scotia coal is at her door and can be delivered at her coast cities at from one-quarter to one-third the freight rate of American coal. Her interests are then altogether with reciprocity in coal, which may lead to the abolition of the duty. Another important change is the attitude of the American railways. Instead of being hostile and giving rebates against our coal, they are users of it and encourage its importation. Another element is the cheapening of transportation charges by water, owing to the increased size of vessels employed. The freight rates to New England points have decreased about 75 per cent. The freight rates to Boston from Louisburg are about 45 cents, against \$1.75 to \$2 a generation ago.

Hence, *Industrial Canada* finds in a reciprocal removal of duty on coal the promise of a vastly-enlarged market for the Canadian coal mines without appreciably injuring their sales in the territory they now hold. It is hardly necessary to suggest that such a proposition practically takes no note of the fact that the United States, and espe-

cially the southern part of the United States, is equipped with coal mines sufficient to supply all the needs of this country in that particular, as well as the needs of Canada, Mexico and other lands, and that the owners of such coal mines are likely to have something to say about increasing the opportunity in this country for an enlargement of the markets for the Canadian coal.

#### INDICATIVE OF PROSPERITY.

As lately noted in the *MANUFACTURERS' RECORD*, the increasing financial strength of the Southern States is remarkable and their progress towards independence in all matters of finance is astonishing except to those who are familiar with their natural resources and also the enterprise and energy now dominant therein. Illustrative of this prosperity is the statement of the American Exchange National Bank of Dallas, Texas, made to the comptroller of the currency on August 25 and just published. This bank, which has a capital of \$1,000,000, now has deposits of nearly \$7,000,000, the exact figures being \$6,818,141. Its loans and discounts are \$5,264,644, and it has as cash on hand and in banks \$2,754,394. Its total resources are close to \$9,000,000. While this institution is one of the larger banks of the South, the rapid growth of its deposit line is equaled by many other banks in other parts of this great section, at least in percentage of gain, if not in actual volume.

Mr. J. F. Ratcliff of Hagen, Ratcliff & Co., Huntington, W. Va., writing to the *MANUFACTURERS' RECORD* regarding an advertisement, says:

I am now in touch with several people who have responded to this advertisement, and hope to be able to make a disposition of the property. I take this opportunity to advise you of the appreciation that is being shown by our people of your splendid articles on West Virginia in recent issues of your paper. None of these articles has been in the slightest degree exaggerated, and if anything they have been too conservative.

Wm. A. Haygood, manager South African Supply Co., Ltd., 11 Courtis Chambers, St. George's Court, Cape Town, South Africa, writes to the *MANUFACTURERS' RECORD* as follows:

I beg to acknowledge receipt regularly of the *MANUFACTURERS' RECORD*. It keeps me in touch with the industrial life of my own country, the United States, and gives me the gist of all political and social questions affecting its upbuilding. I value it more highly than any other single publication within my knowledge.

#### THE COTTON MOVEMENT.

Mr. William V. King, superintendent of the New York Cotton Exchange, in his summary of the cotton movement of the year just closed, shows that the receipts at the ports were 10,295,445 bales; that 1,132,606 bales went overland to Northern mills and Canada, and that the Southern mill takings (less taken from ports) were 2,225,978 bales, making a total commercial crop of 13,654,029 bales. Comparing this year with last, he shows that Southern mill takings increased from 1,889,032 bales to 2,270,531 bales; that Northern mills and Canada takings increased from 2,130,505 bales to 2,413,678, and that the increases in exports were as follows: Great Britain from 2,576,065 to 4,124,069, France from 705,059 to 857,220, Germany and the Continent from 2,647,250 to 3,349,642, Mexico from 55,869 to 70,178 and Japan, etc., from 47,414 to 332,374. He says:

"Perhaps the most remarkable as well as the most striking feature connected with this crop was the marvelous trade demand which began with the opening of



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the season. The two moderate crops grown during the two previous years created a vacuum for American cotton which the mills of the world hastened to fill; the present season, therefore, has witnessed the practical absorption by the trade of the largest cotton crop ever grown, and at prices remarkably remunerative both to the producer and the consumer. We believe this is unique in the history of the cotton trade—that a monster crop should yield the grower to the end a very high price and yet be equally profitable to the spinner. \* \* \* One of the most interesting facts brought out \* \* \* is the remarkable demand from the mills of our own country. The rapid increase of the spindles of the South, together with the construction and operation of newly-built mills there, has resulted in takings both North and South of about 4,750,000 bales. Another feature of interest is the fact that in spite of the war the exports to Japan show a very large increase, viz., this year 332,374 bales, against last year 47,444 bales. What this energetic nation may do another season under the influence of peace remains to be seen. The value of cotton exported this year may be estimated at about \$390,000,000."

**ACTIVITY AT HUNTINGTON.**

Mr. J. C. Miller, president of the Miller Supply Co. of Huntington, W. Va., writes to the MANUFACTURERS' RECORD that business in that city has been remarkably good this year, and adds: "The town is alive, and there are more new industries being established here now than ever before and more building going on. The traveling men say to us that they consider Huntington one of the best towns they make."

Mr. Miller, who has been a subscriber of the MANUFACTURERS' RECORD for upwards of 20 years, says that when he was a buyer of supplies for companies with which he was connected he always used the MANUFACTURERS' RECORD for information to get what he wanted. He notes that the MANUFACTURERS' RECORD is now carrying the advertisements of more than 50 firms with which his company is doing business.

**EASY TO LAUGH.**

Periodicals calculated to increase the chances of sociologists for light and gentle employment seem inclined to treat as a huge joke a recent suggestion of the MANUFACTURERS' RECORD, based upon acknowledged facts, that the tendency of those forms of agitation in which sociologists gain most prominence and most profit is to undermine the morality of the country. Such agitation crystallized in legislation has encouraged lying and deception. Such a trivial matter as that, however, is, of course, beneath the serious notice of sociologism, which is decidedly short on facts and long on hysterical imagination in pushing its theories among the uninformed. The plea of the MANUFACTURERS' RECORD in behalf of American morality was not made to sociologism in a hopeless maze. The plea was addressed to well-meaning individuals whom sociologism would dupe.

**HEART THROBS AND WAFFLES.**

In an advertisement of Dallas, Texas, the One Hundred and Fifty Thousand Club of that city tells us to read the following:

"Dallas, the beautiful butterfly of the Southwest, under whose bright wings the broad prairies bloom with perpetual peace and plenty. I can understand why so many longing eyes turn to Texas, and why so many weary hearts sigh for rest in Dallas. One is an empire of glory and the other is the glory of the empire. Texas is the largest waffle on the griddle of North America. She is sweetened with the honey

of happiness pouring from the bunghole of prosperity."

And not a word about hot tamales or dickey-birds on toast!

**POKING FUN.**

Some one, knowing governors of Southern States to be unusually good-natured, is apparently having a bit of fun at their expense. For a dispatch from New Orleans tacks on to the statement that the Southern Pacific system will transport three baggage-car loads of Louisiana and Texas products for exhibition at several New England fairs the statement that a sort of living exhibit is to be made at said fairs in the shape of the governors of Arkansas, Texas, Florida, North Carolina, South Carolina, Virginia and Maryland, for whose use divers Southern and Eastern railroad lines have tendered special private cars. It is said that the governors are to assemble at Raleigh, N. C., September 9, and thence proceed in a bunch to Concord, N. H. It was announced some time ago that one Southern governor, presumably starting from Raleigh, was to make several speeches in New England. Upon that statement this latest joke may be hung.

Seriously, the item has the appearance of an adroit advertisement of the rich territory served by the Southern Pacific system. If that be so, the MANUFACTURERS' RECORD must suggest that while it is deeply interested in the healthy development of that territory, it does not wish to see it developed at the expense of other parts of the South in which it is just as deeply interested, and that though Southern governors have at times been easy marks for promoters of "conventions," "conferences," "parliaments" and such like, they ought not to be placed in the plight of serving as advertising mediums for special interests.

**COLUMBUS, MISS.**

Illustrative of recent progress at Columbus, Miss., is the pictorial and industrial edition of the Columbus Dispatch, now in its twenty-sixth year. Issued in pamphlet form and handsomely illustrated, the publication contains descriptions of the many industries of the community, nearby agricultural successes and business and social opportunities. Significant facts are set forth by Mr. I. H. Sykes, secretary of the Progressive Union of the city. He shows that since 1902 the number of manufacturing industries in Columbus has increased from eight, with a capital of \$391,000 and a weekly pay-roll of \$2715, to 28, with a capital of \$1,360,000 and a weekly pay-roll of \$11,441. During the past two years the city has built a City Hall, quarters for the fire department and a new school building, and has installed a water plant and sewerage system and has laid 27 miles of cement sidewalks.

**LITTLE ROCK.**

In the sixteenth annual report of the Little Rock (Ark.) Board of Trade, which carries with its lists of officers and members, its constitution and by-laws and the last annual address of President George W. Rogers, a number of attractive half-tone illustrations of life at Little Rock and in its territory, is a mass of condensed facts about the city of interest, from which the following have been selected: Area of the city in square miles, 11.45; number of miles of streets open, 238.50; mileage of improved streets, 75; mileage of sewers, 27; aggregate commerce in 1904, \$62,000,000; number of business houses, 1856; number of banks and trust companies, 15; number of industrial plants, 318; bank clearings in 1904, \$49,691,849, an increase of more than \$33,000,000 in 10 years; cotton receipts, 1904, \$9,871,351.

**IN THE COAL RIVER BASIN OF WEST VIRGINIA.**

[Special Correspondence Manufacturers' Record.]

Charleston, W. Va., August 31.

A trip by wagons into the wonderful fields of the Coal River basin has given me a realization of the possibilities of coal production in a hitherto undeveloped section of the State which I could not have otherwise obtained, and has impressed on me even more deeply than before the untold and almost unknown vastness of the natural wealth of West Virginia. It is said that somewhere on Coal river there is 80 feet of coal in column, and that seven veins of coal are characteristic of the whole field. I cannot verify these statements by what I saw, and the 80 feet of coal must be a freak and may be a myth. I make no pretensions of having looked the field over in a critical or expert way, and developments have not been carried out sufficiently to enable the most expert investigator to tell with precision exactly what the field contains. But there have been openings enough made to prove the entire field an unusually rich and valuable one, and with the completion of the Coal River branch of the Chesapeake & Ohio Railroad into the field there must be an early and an important development there.

Although the coals of Coal River were among the very earliest discovered in the State, the field has remained practically undeveloped till today, and not a pound of coal has been shipped out for commercial purposes. Without railroads there can be no commercial coal-mining, and it was only recently that a syndicate with ex-Governor Wm. A. MacCorkle at the head of it organized a road to build into that section. The road, which is to become a part of the Chesapeake & Ohio system, is now under construction, and will be completed within a year. It starts at St. Albans, 12 miles below Charleston, where Coal river empties into the Kanawha. After following the main river up for 12 miles, where it forks with Little Coal river, it branches off to Little Coal river, which it follows up to Madison, the county-seat of Boone county, where the Spruce river and Pond fork join to form Little Coal river. From here the road will proceed up Spruce river for 12 miles to the mouth of Laurel, and it will go up Laurel for five miles. This will give a present length of 50 miles. As required by development branch lines will be constructed, but the line now being built will open up a large section. Leases of properties will be made by early spring, and as this section is one of the heaviest and best timbered in the State, mines can be opened up and put in condition for making shipments by the time the railroad is completed.

Accompanied by a veteran guide who knows all the openings and the mountain trails and the hospitable farmhouses in the entire section, I made a 200-mile trip, which took us as far up as the headwaters of the Coal river. Without attempting to enumerate all the openings we looked at, I will mention that on Beaver Pond branch of Pond fork, in Boone county, we found an opening showing seven feet of clean, bright coal; on Price's branch we looked at three openings, overlapping each other, two with five feet of coal to the seam and the third of 72 inches; on the divide between Pond and West forks we saw a phenomenal opening showing a total of 22 feet of coal, and on Drews creek two openings, the lower one showing a seam of five feet, denominated the Eagle seam, and being unusually large for that vein, and the other showing 94 inches of coal of the No. 2 seam. All of these coals had a bright, clean appearance, and some of the samples which had been thrown out on the mountain side at the time the openings were made had stood the effects of the weather for a year without serious slacking.

I must leave to experts the technical description of these coals, going no further here than to say the analysis of these coals show a high percentage of fixed carbon, are uniformly low in ash and in sulphur, have a hardness that particularly adapts them to shipping, and that they meet every requirement for domestic or blacksmithing use, coke ovens, by-product plants, gasmaking or the generation of steam. I went into the field more especially to get a bird's-eye view of the country while it is yet "backwoods;" to see in a general way what the coal openings revealed, and to look at the vast forests of oak, poplar, hickory, etc., of which I had heard much, and I got a better idea of interior West Virginia than I could have otherwise obtained.

Those who have interests in the section, and who have very carefully examined the country's resources during a term of years, gave me a description of the coals there to this effect:

"The whole Coal River section is underlaid with what is known on the Kanawha as the No. 1 seam. It runs from five to six feet in thickness, sometimes with a small parting, and is found at and above the water line. All the other seams are above water line, of course, and are easily accessible and may be cheaply operated by drift mining. The same characteristics prevail generally throughout the whole Coal River basin, which has an area of 200,000 to 225,000 acres. The most important veins are No. 1 and No. 2, according to the nomenclature of the Kanawha river operators, which are found under 95 per cent. of the territory, No. 2 here attaining a thickness of six to seven feet.

"The Cedar Grove seam, which is the finest all-around Kanawha coal, here attains a thickness of four and one-half feet, and is in better condition than on the Kanawha river, where it generally has a thickness of about three feet. It makes a better coke than the New River coal, and at the same time is a hard, free-burning domestic coal. It is a splendid smithing coal, and at the same time a great steam coal. The Winnifrede vein is also in splendid condition here, and will run from five to seven feet in many cases without a parting.

"The Lewiston has a large development, and even as capricious as the Lewiston seam generally is, it is here found in its largest and best condition, and from five to seven feet can be mined from this seam.

"The Coalburg seam is found here in about the same thickness, but the area is less than of the other coals, because, being a top seam, it has been more easily eroded.

"No. 5, which is one of the most famous domestic coals of the Kanawha valley, and is also a splendid steam coal, has a thickness here of five to seven feet.

"In one mountain there is a development of all seven veins of coal, every one of which is workable, and in these workable seams, overlapping each other, there is developed of No. 1, five and one-half feet; No. 2, six feet; Winnifrede, six feet; Coalburg, six feet, and No. 5, five feet—a total of 28½ feet. Every one of these veins is clean excepting a small parting of two and one-half inches in No. 2. All seven of these seams are found under the whole territory of greater or less thickness. Of course, it is not to be expected that such an average will be maintained over the whole field, but there is an average of three of these seams, giving at least 15 feet of coal, under the whole property.

"In a series of mountains at the head of Coal river there is a seam showing a thickness of 22 feet, with a parting of about two feet in the middle and the rest being pure

coal. This is over a basic area of probably 40,000 acres, and will average about 15 per cent., or 6000 acres, and all the other coals named are found below.

"On the upper edge of this basin the Kanawha and New River coals underlap. It has not yet been ascertained how much there is of this or how far they underlap. Enough is known, however, to clearly demonstrate this field to be one of the richest in the country."

In talking with Mr. Neil Robinson of Charleston, a coal expert, who has probably examined more of the coal lands of the Appalachian range than any other coal specialist, and whose reports are accepted as authority by purchasers the country over, I found him cautiously conservative, although warmly commendatory of the field as a whole. With the prudence of the professional, who wants to be absolutely certain before he commits himself, Mr. Robinson said:

"The indications are that the Coal River basin will be a very rich and a very valuable field, but I think it a little early to make any estimate on the full extent and value of the field. I prefer to wait, before endorsing any sweeping and detailed claims, until more openings have been made. There is always danger in overenthusiasm. If you make a claim of having 70 feet of coal and a prospective purchaser can check up only 65 he is disappointed, whereas if you claim only 10 feet and he finds 15 he is overjoyed. Any property that can show a five-foot vein of coal is a mighty fine proposition, and anything over that is so much gain.

"There are places in the Kanawha fields where they are working three seams, but it is hardly fair to the district to put on it the burden of proving every claim the enthusiasts make. It is contrary to all experience, all rules and the laws that seem to govern creation that all the coal beds of the Kanawha fields should be found in any large area. In places all the horizons may be found in column, but not all the coal seams will be found in equal condition of development.

"There may be an average of 15 feet of coal over a very large part of the Coal River basin, and I regard it as a very valuable field—one of the very best in the State. But properties that will turn out 10,000 tons of coal to the acre are very good, very fine. Now, our coals here will run from 1610 to 1625 tons to the foot per acre. At 1610 tons 15 feet of coal will run 24,150 tons to the acre, while, as I said before, a property that will turn out 10,000 tons to the acre is a very fine proposition.

"I believe the Coal River field will prove a very valuable field, indeed, and the Coal river, with its large number of small streams, gives a vast number of properties that can be developed with drift mining advantageously and in an economical manner."

It seems to me that with all of his caution and conservatism Mr. Robinson provides a pretty substantial foundation for the enthusiast to justify himself on. Think of getting for \$50 an acre or less lands that at even six cents a ton royalty will yield a revenue of \$1440 an acre! It is not difficult to appreciate the reason why so many people of West Virginia are neglecting other forms of investment and putting their surplus money into coal lands, with such prospects ahead and such prices as prevail today.

ALBERT PHENIS.

## PROGRESS IN DEVELOPING YADKIN POWER.

[Special Correspondence Manufacturers' Record.]

Whitney, N. C., September 4.

Returning to Whitney after an absence of about three months, I find very substantial progress has been made on the construction of the great dam and canal which are to utilize the waters of the Yadkin river at this place in the development of some 76,000 horse-power ultimately, constituting this one of the most notable works of the kind to be found in the world.

The first spadeful of earth was turned February 1, but it was hardly before June 1 that men and machinery were in shape to vigorously proceed with every feature of the work. Now three steam shovels are at work night and day at three different places on the big four-mile canal, and about 300,000 cubic yards of earth have been excavated of the 1,750,000 cubic yards it is estimated the entire work will require. In addition the cofferdam has been completed to cover about one-third of the dam, about 450 feet, and the entire length of the 1400-foot spillway.

This exposes a surface of about 10 acres of river bed. The foundations of the first section of the dam are all prepared, and on August 28 the first stone of the dam was laid. There were no ceremonies attendant on the inauguration of this important stage of the work, although several visitors were on hand who watched with much interest the swinging into place of the first of the 10-ton granite blocks which form the first course of masonry.

This first section of the dam and also the masonry for the 1400-foot spillway will all be completed before the second cofferdam, to cover the remaining section of the dam, is started.

The excavation on the hillside, where the gateway and the abutment tie into solid rock, has been blasted out, and the work is in a forward state of completion. The exposed river bed reveals a highly sat-

isfactory condition, the solid rock coming up to all the expectations and providing a foundation for the dam which will last for all time.

There has been no interruption of work on account of high water, and everything is proceeding in a highly satisfactory manner. So far the work has all been done under original estimates, and it is regarded that unless unforeseen conditions arise the entire work will be completed in accordance with the estimates.

The minor power plant, a very handsome stone structure with tile roofing, has been completed, and it furnishes lights for the town and for night work at the dam and shovels. It also furnishes incandescent lights for all the camps, for the company's house, the residences, offices and stores of the town. The water for this plant is supplied through a miniature canal 28 feet wide, carrying four feet depth of water. It is conveyed into a substantially-constructed forebay, and works under a head of about 12 feet. This canal is capable of developing in excess of 300 horse-power. Officers of the Whitney Company are figuring on increasing the capacity of the machinery at the power plant up to the maximum of 300 horse-power and utilizing the power during the daytime in the operation of a cotton mill. It is reported that this is one of the cheapest power producers in the world. It is giving a practical illustration to people unfamiliar with water-powers of what can be done.

When this power is applied to an up-to-date cotton mill it will also be a practical illustration of the application of electrical power to cotton mills. A cotton mill is projected to contain 10,000 spindles at first. There is available a good supply of country labor, proved to be the best adapted to cotton-mill work. There is plenty of cotton in the vicinity,

possibly enough raised on the company's lands to supply the mill, and it is believed that when this mill has been started others will follow. A practical demonstration would undoubtedly carry more weight than mere discussion, and one object in putting in the mill as proposed would be the encouragement of other cotton mills and an industrial development generally. While the streets and lots of the town have not been staked out or lots offered for sale, they are receiving careful attention, with a view to operations along those lines being undertaken in the spring.

While the time of completion of the whole work depends on many conditions—the weather, number of hands available, etc.—yet with work on all parts proceeding simultaneously, as at present, it is figured that the enterprise ought to be completed within two years. There are now about 800 men employed, 300 of them on the night shifts, all three of the shovels being worked at night. Night shifts are also employed on features of the dam work, and a spirit of hustle pervades the whole camp. All the day laborers are negroes from all over the South, and while some difficulties have been encountered at times in obtaining the number of laborers required, the labor question is said to be fairly satisfactory on the whole. The greatest trouble has been caused by agents of other contractors endeavoring to entice whole gangs of laborers away from the work to distant places. As this is an offense under the laws of North Carolina punishable by a heavy fine, the contractors for this work have applied to the courts for relief. The agents of one firm have already been fined \$200, and it is hoped that the effect of this will be salutary. Ultimately there will be from 1500 to 2000 men at work here.

Although nothing has been done on the main power plant, the construction of the electrical machinery is progressing satisfactorily, and the power-house and its equipment will be completed a short time before the dam and canal are finished. Contracts have been let for five main generators of 5000 kilowatts each, giving a total of 25,000 kilowatts, equal to nearly 34,000 electrical horse-power. Each of the main generators will carry on its shaft one 100-kilowatt exciter. The General Electric Co. has the contract for the electrical equipment, including transformers and switchboard. The five generators will be driven by five vertical shaft water turbines of 9000 horse-power capacity, the total capacity of the turbines that will be installed at present being 45,000 horse-power.

No efforts are being made at this time to contract for the sale of power. It is felt that there will be plenty of time for that later on, as it has been satisfactorily demonstrated that there will be no difficulty in selling in the neighboring factory towns all the power that the plant can generate. It is expected, however that by the time the plant is completed the industrial development of Whitney will have developed to such an extent as to utilize a large portion of the available power.

Since I was here before a number of improvements have been made, so that every comfort and facility found in old communities is provided. The postoffice has been established, telegraph and express offices opened, long-distance and local telephone lines have been built, and there are regular daily passenger trains running between Whitney and Salisbury. The Whitney Company's very comfortable and convenient house has been finished, and is ready for the use of the officers of the company and their friends.

Following the wide publicity given the enterprise through the publication in the MANUFACTURERS' RECORD last spring of

the details of the gigantic undertaking, Whitney has become quite a popular visiting place for the public, who come here from far and near, in vehicles and on the trains, singly and in groups, to watch the enormous steam shovels digging the canal, to see the giant derricks swing a 10-ton stone about with the utmost ease, and to take in all the details of the tremendous development. A picnicking party on the high bluff overlooking the dam site, where a comprehensive view may be had of the work in progress, as well as of the mountains of massive granite blocks assembled for use in the dam, is almost a daily occurrence, and couples and groups are found investigating some portion of the work at almost any time.

At the company's vast quarries, located at the station called Granite Quarry, five miles out of Salisbury, there has been erected a steel-cutting shed 210 feet long by 60 feet wide. It is a model plant of its kind, thoroughly equipped and up to date, one of the features being an electrical overhead crane to handle the stone needed for the dam work. Here a compressed-air plant has also been installed with an Ingersoll-Sergeant duplex compound compressor having a capacity of about 1700 feet of air a minute. It is the intention to operate all the drills with compressed air instead of steam.

Work will not be resumed at the Whitney Company's gold mines at Gold Hill until the completion of the power plant which will supply the power required in their operation. Nothing has yet been done towards the construction of the stamp mill which will be erected at Whitney, but all this work will be taken up in due time, so that the stamp mill will be ready for operation by the time the power is turned on, and then the mine will be lighted as well as worked by electricity developed at Whitney.

In brief, it may be said of present conditions at Whitney that everything is proceeding in accordance with the well-matured plans of the Whitney Company, and that with the least possible delay there will be brought to completion one of the most important developments of its kind to be found anywhere. The magnitude of the undertaking and the potentialities in the way of creating a vast industrial center here can hardly be comprehended without a visit to the work. The importance of the project grows on one the more it is investigated.

ALBERT PHENIS.

### Tobacco at Danville.

At the annual meeting of the Danville (Va.) Tobacco Association it was reported that the sales of tobacco at Danville during the 12 months ended August 31 aggregated 38,029,050 pounds, valued at \$3,251,633. The association elected Messrs. E. W. Dixon, president; John F. Rison, vice-president, and I. S. Bendall, secretary and treasurer.

The Little Rock Board of Trade in a circular-letter to the merchants of Arkansas suggests that if their regular trading town is closed by quarantine regulations Little Rock jobbers will give them a hospitable welcome. The jobbers through a committee of the Board of Trade are offering free transportation to and from the city to all who buy from merchants whose names are signed to the circular goods to the amount of \$500.

Receipts of cotton at Little Rock, Ark., this year were 218,043 bales, an increase over last year of 50,020 bales.

Assessed valuations at Galveston, Texas, amount to \$21,244,653.



## Males Not Menaced by Females in Industry.

[Written for the Manufacturers' Record.]

Emotions, statistics and theories ran riot at the annual convention at Detroit of the International Association of Factory Inspectors, representative of the class which derives the greatest material benefit from the practice of the science of sociology. Typical of much that is out-given by devotees of the science seems to have been an address by W. Lester Bodine, described as "superintendent of the department of compulsory education of the Chicago public schools," and reported as saying:

"Man will soon be driven entirely to agriculture and the mines by the competition of feminine workers, just as the horse is being relegated to the plow by the automobile."

His speech is said to have created a mild sensation, especially as he "produced federal statistics covering the last 20 years showing that the industrial competition of women, children and machine labor was driving the men out of the large cities to fields of heavy manual labor in mining and agriculture," and said:

"In 1890 there were 3,914,571 women who were employed in gainful occupations in America. In 1900 the number had increased to 5,329,807. We are rapidly drifting to the age of the 'eternal feminine,' when men will be a back number and forced to return to the soil and to those fields of labor where only his physical endurance will save him in the struggle for survival."

Of course, such statistics and such sentiments could not fail to please the element of society which makes possible the occupation of factory inspectors, superintendents of departments of compulsory education and other such sociologizing manifestations. But it may be asked, Why should not men be driven back to the soil, to agriculture and the mines and other fields of heavy manual labor? What would become of the country if all men became factory inspectors, superintendents of departments of compulsory education, high priests of sociology or employees in other light and genteel occupations? Surely the orator at Detroit hardly expects the women of the country to do all its work in spite of his dread of the "eternal feminine."

But are the tendencies of the time in industrialism so eternally feminine? W. Lester Bodine's "federal statistics" as quoted might support such an impression if they should be swallowed whole. But they are really not statistics. Like so many other figures employed in the propagation of sociology, they do not seem to have been handled with proper care or knowledge. Their use by Mr. Bodine indicates that he has fallen into the trap which has caught before even such great men as the Honorable Hoke Smith of Georgia, a trap baited with the fact that some time after preliminary figures of the 1900 census dealing with occupations were promulgated the discovery was announced of a deficiency in the occupations figures in the census of 1890 amounting to such a small matter as at least 582,522. In other words, more than half a million workers had been not counted in 1890. That discovery is now nearly two years old, but Mr. Bodine evidently has not had it called to his attention, and in good intent clings to the unrevised figures, 3,914,571, representing females in gainful occupations in 1890, when the real estimate of the census is 4,005,532. Moreover, he compares the imperfect figures for 1890 dealing with the population of the United States on this continent, exclusive of the inhabitants of Alaska, with the figures for 1900, embracing the population of Alaska and

Hawaii as well. His figures, therefore, show an increase in the number of females in gainful occupations of 1,415,236, or 36.1 per cent., when the increase shown by the corrected figures was more than 100,000 less, or 1,313,865, equal to 32.8 per cent.

Figures indicating the increase in the number of female workers in the 10 years, however, are of themselves of no value as a predicate for alarm at the danger of men being driven to their proper occupations, to the fields of heavy manual labor. The basis for a reasonable study of tendencies, bearing in mind that even official figures are not absolutely reliable, is to be had in the facts about the increase in the number of female workers in comparison with the increase in the number of females and with the increase in the number of male workers compared with the increase in the number of males. This comparison is made possible by the following table showing the number of persons 10 years of age and over engaged in gainful occupations compared with the population 10 years of age and over for both sexes and for each sex separately in 1890 and 1900:

Sex and years.	Population 10 years old and over.		Per cent. of those 10 years old and over.	
	Number.	In gainful pursuits.	In gainful pursuits.	
Both sexes.				
1890.....	67,949,821	29,073,233	59.2	
1900.....	47,413,559	23,318,183	49.2	
Males.				
1890.....	29,703,440	23,753,836	80	
1900.....	24,352,659	19,312,651	79.3	
Females.				
1890.....	28,246,384	5,319,397	18.8	
1900.....	23,060,900	4,005,532	17.4	

Figures in this table and in the following comments, except where specially indicated, refer to the United States, not including Alaska and Hawaii.

In the 10 years the number of males in the population 10 years of age and upwards increased from 24,352,659 to 29,703,440, or by 5,350,781, or 21.9 per cent., and of those in gainful pursuits from 19,312,651 to 23,753,836, or by 4,441,185, equal to 22.9 per cent., while the number of females in the population increased from 23,060,900 to 28,246,384, or by 5,185,484, equal to 22.4 per cent., and the number in gainful pursuits from 4,005,532 to 5,319,397, equal to 32.8 per cent. Superficially these rates of increase, in which the females exceed both as to population and as to gainful pursuits, might suggest to the unwary that there are grounds for Mr. Bodine's apprehensions about the crowding of the poor males from industry. But there are a number of essential qualifications. In the first place, the female population of all ages increased at a greater rate, 21.6 per cent., than the male population, 21.4 per cent. The increase of females of foreign birth was, by rate, greater than that of males of foreign birth. In the second place, the proportion of females in gainful pursuits to the total of both sexes thus engaged was not materially changed in the 10 years, being 17.1 per cent. in 1890 and 18.2 per cent. in 1900. In the third place, study of the figures in the following table of the general divisions of gainful pursuits practically knocks the prop from under the theory that male workers are being crushed to earth:

Occupations.	1890.	1900.
Males:		
Agriculture.....	8,378,603	9,404,429
Professional.....	832,646	827,941
Domestic and personal.....	2,553,161	3,458,308
Trade and transportation.....	3,097,791	4,263,617
Manufacturing and mechanical.....	4,650,540	5,772,641
Females:		
Agriculture.....	769,845	977,336
Professional.....	311,687	430,597
Domestic and personal.....	1,667,651	2,095,449
Trade and transportation.....	228,421	503,347
Manufacturing and mechanical.....	1,027,928	1,312,668

In these comparisons it must be borne in mind that absolute accuracy is not possible because of differences in classification in the two censuses.

Here again the rates of increase seem, at first blush, to be against the men, especially in the combined fields of agriculture, trade and transportation and manufacturing and mechanical, where the rate

of increase for them was 20.5 per cent., while the rate of increase of females in the combined fields was 37.8 per cent. Here, too, though, superficial appearances are deceptive. For the increase of males, 3,313,843, in these fields was more than 74 per cent. of their total increase in gainful pursuits, while the increase of females, 767,157, was less than 59 per cent. of the total increase of females in gainful pursuits. Inspection of the figures of specified occupations in the general fields discovers that while the greatest actual and proportional increase of males in agriculture was in the class of laborers, the increase being 699,150, or about 23 per cent., the greatest actual increase of females, 125,144, at the rate of more than 23 per cent., was in the same class, though their greatest proportional increase, more than 35 per cent., was in the class of farmers, planters and overseers. That looks like a tendency to crowd the males until it is noticed that a falling off of the males in agriculture to the number of 54,711 in the nine States, from Maine to Pennsylvania, inclusive, the only States, except Delaware, Ohio and Indiana, showing such decrease, was marked by an increase there of females in agriculture of but 14,009, and that the great increase, 157,986, more than three-fourths of the total, of women in agriculture was in the South, where negro females labor more generally in the fields than white females in other parts of the country. But any tendency of negro females to monopolize the labor of their race cannot be regarded as a criterion of the tendency of females generally. Negro females at work are not pushing negro males from the large cities to fields of heavy manual labor, but are the rather encouraging them to drift to the cities to live by the labor of the females. All of which is cited for the purpose of suggesting the danger of using mere figures to prove any social theory.

In the field of trade and transportation the greatest actual and proportional increase of males was in the class of salesmen, the actual increase being 255,966 and the rate nearly 125 per cent., the number of heavy laborers, such as draymen, hackmen, teamsters, etc., increasing in number by only 169,764, or at the rate of about 46 per cent. The rate of increase of males in that field was 37.6 per cent., but of females it was 120.3 per cent. The increase of the latter, though, was largely in specified occupations which a sensible male should hardly begrudge them in this day when there is a strenuous cry all over the world for males in productive industry. Saleswomen increased from 58,451 to 149,230, or by 90,779, or 155 per cent.; stenographers and typewriters from 21,270 to 86,118, or by 64,848, equal to 304 per cent., and bookkeepers and accountants from 27,772 to 74,153, or by 167 per cent. The total increase of females in these three classes of occupation, for which they are better qualified by nature than are males, was 202,008, or about 73 per cent. of their total increase in the field of trade and transportation.

In the third great field, that of manufacturing and mechanical pursuits, females constituted in 1900 but 18.5 per cent. of

Occupations.	1890.	1900.	Increase.	Increase per cent.
Males:				
Agriculture.....	8,378,603	9,404,429	1,025,826	12.2
Professional.....	832,646	827,941	185,295	30.8
Domestic and personal.....	2,553,161	3,458,308	935,047	36.5
Trade and transportation.....	3,097,791	4,263,617	1,165,826	37.6
Manufacturing and mechanical.....	4,650,540	5,772,641	1,122,101	24.1
Females:				
Agriculture.....	769,845	977,336	207,491	26.9
Professional.....	311,687	430,597	118,910	38.1
Domestic and personal.....	1,667,651	2,095,449	427,798	25.6
Trade and transportation.....	228,421	503,347	274,926	120.3
Manufacturing and mechanical.....	1,027,928	1,312,668	284,740	27.7

In these comparisons it must be borne in mind that absolute accuracy is not possible because of differences in classification in the two censuses.

the total number engaged. In 1890 they had constituted 18.1 per cent. of the total. What timid male can discover in the 10 years' change of percentage disaster yawning for his sex? Let him ex-

amine the details. In cotton mills the number of males increased by 45,611, equal to 56.8 per cent., and females increased by 27,638, equal to 29.7 per cent. In the textile industry as a whole, including carpet factories, knitting mills, silk mills, woolen mills and cotton mills, the males increased by 42,856, equal to 19.1 per cent., and the females by 50,041, equal to 21.8 per cent. In that industry, of all the manufacturing and mechanical pursuits as classified by the census, is, perhaps, the nearest approach to Mr. Bodine's theory that "the industrial competition of women, children and machine labor" is driving the men out of the large cities to fields of heavy manual labor in mining and agriculture.\* Why not? Here also the relative fitness of the sexes enters with judgment inclining toward the female because of her deftness. Even if that quality is not considered, the pressure upon the males in the textile industry cannot be very influential upon their industrial standing, inasmuch as their number in that industry in 1890 constituted but 4.8 per cent. of their total number in manufacturing and mechanical pursuits. The fact that female boot and shoe makers and repairers increased in the 10 years from 33,704 to 39,510, or by 5806, hardly accounts for a decrease in the same period of males in that occupation from 180,871 to 169,393, or by 11,478, unless we are ready to confess that a female is twice as expert in that line as a male, and, therefore, the proper one to make boots and shoes. The increase of dressmakers from 292,668 to 344,794, or by 52,126, the largest increase in any occupation of females in the field of manufacturing, was perfectly natural, and may have been in part a consequence of the slight falling off

\*It may be well in passing to suggest that the word "children" as used by the census means persons, in age, 10 to 15 years, inclusive. In 1900 the census counted 1,750,178 of such engaged in gainful pursuits. Sociologists, in its thesis or in its oration, quite frequently sets forth those figures in phraseology containing such terms as "child slaves," "tolling babes" or "infants," and, obscuring many vitally qualifying facts, creates in the minds of readers or hearers an impression that more than 1,500,000 little ones fit only for the nursery are bound to the wheels of manufacturing industry, or, as one rhetorician put it, "shut within factory walls from one year's end to another." It is true that many children are put to work at too early an age. But that evil will never be corrected, as it should be corrected, through exaggeration of facts or through misleading statements. As bearing upon the dream that children are crowding out men from industry it may not be amiss to give a few facts. In 1880, of the total number of persons in gainful occupations 80 per cent. were men, 13.5 per cent. were women and 6.5 per cent. persons under 16 years of age; in 1900 the men constituted 73.3 per cent., the women 16.6 per cent. and the children 6.1 per cent. The men's percentage fell off from 84.7 to 82.4 in agriculture in the 20 years, and from 81 to 79.1 in manufacturing, but increased from 95 to 95.5 in mining and quarrying. The percentage of women increased from 5.9 to 7.4 in agriculture, from 15.4 to 16.9 in manufacturing and from less than one-tenth of 1 per cent. to two-tenths of 1 per cent. in mining. The percentage of children increased from 9.4 to 10.2 in agriculture and from 3.6 to 4 in manufacturing, while it fell off from 5 to 4.3 in mining. There does not seem, then, to have been any extreme crowding of the men by women and children into either agriculture or mining, and the increase of women and children in manufacturing leaves both classes, especially children, of comparatively slight importance in the total. Of the 1,750,178 under 16 years of age in gainful pursuits, 969,555 were between 14 and 16 years of age, hardly classifiable as "infants" or "babes." Of the total, 233,869, or less than 16 per cent., were in manufacturing and mechanical pursuits, and of the 233,869 thus engaged, 77 per cent., or 221,337, were between 14 and 16 years of age, the period when it is about time for boys and girls to begin to work if they expect to live by work. It must be remembered that, as an effect of "child-labor" agitation during 20 years, a large element of unreliability about ages in the census must be considered.

of the males in masonry and a decrease of 18,337 of them in carpentry. But an increase of males of 100,979, or 34 per cent., in iron and steel workers; of 95,897, or 51 per cent., in machinists, and of 83,400, or 59 per cent., in engineers and firemen hardly sustains the theory about men being driven to fields of heavy manual labor by the competition of females, children and machine labor. The "eternal feminine" has a very slight hold upon mining and quarrying, and has little to do with the increase in the number of males, 175,545, or 45 per cent., in those occupations, and, indeed, the machine is about the only thing tending to check their relative increase there.\*

To be sure, among females the number of laundresses increased by 118,651, or 54 per cent.; of housekeepers and stewardesses by 60,840, or 70 per cent., and of nurses by 67,295, or 162 per cent. Their number among teachers and professors increased by 81,548, or 33 per cent., while the number of males thus occupied increased but by 17,241, or 17 per cent. But in those respects females would be justified in complaining if the conditions were reversed. Indeed, they have a right to ask why in 1900 there were 2090 dressmakers, 1739 milliners, 4837 seamstresses, 1944 lace and embroidery makers, 4503 glove makers, 50,683 laundresses and 12,265 nurses among the males. Those figures are really alarming. They indicate an invasion of female provinces. Another occupation which, unfortunately, is not indicated by the census, as it has hardly reached the dignity worthy of notice by the census, is sociologism. But almost daily events prove that this field, which one might expect to be monopolized by females, inasmuch as hysterics is the chief equipment for success in it, is literally overrun by alleged males, leaving females interested in it little to do beyond sitting in legislative galleries and hurrahing or hissing as their emotions dictate.

Sociologism is an easy way to make a living. It involves no heavy manual or mental labor. Of course, all the males who are supposed to be shoved out of productive occupations by females have not yet entered the profession of sociologism, but thousands of them, especially among the negroes, have discovered what is to them an earthly Paradise, where they are not obliged to strike a lick for their living, but where, like the first male in the original Eden, they willingly place the burden upon the females.

The real task of students of industrial conditions is not to preach the theory of

the crowding out of males by females, but to exert themselves to force the male drones into productive work; it is not to cultivate a false sentimentality limiting the opportunities of males and females to

assist in doing the work demanded for individual and national progress, but to induce conditions where males and females may employ their powers to the best advantage.

## IRRIGATION OF PUBLIC LANDS.

By C. F. Z. CARACRISTI, C. E., E. M.

[Written for the Manufacturers' Record.]

Among the best public policies of our country, that of irrigation probably stands forward with more general approval than and other. The reason for this is obviously a desire on the part of the people not engaged in rural pursuits to assist the farmer and to increase our national wealth. We never hear the farmer abused as a class. He is the one man of all men in America who enjoys the hearty respect of the masses, as well he deserves it. The miner or other laborer may go on strike; they may riot and even lead to war, but the farmer goes on harvesting his crops, raising his cattle and furnishing food for himself and the rest of the world. He may be educated or ignorant, Catholic, Jew or Protestant, Republican, Democrat or Populist, yet he is always the good citizen that destiny intended him to be, not because of the flowery sentimentalisms that city folks attribute to his life, but because of a far greater reason—one founded by our Creator when He made man—the reason that physical man's natural occupation is that of tilling the fields and raising flocks. Every physiological as well as philosophical fact that we can discover and apply points to the fact that man was preordained to a rural life. Our respect for the tiller of the soil is due to our respect for our Creator. Let us conceive the greatest calamity that could befall man. Let us go so far as to assume a reversion of our ambitions for wealth, learning and industries to primeval simplicity or even barbaric rudeness, who will be left of all our boasted and pompous social order? None but the farmer.

The farmer or herdsman cannot receive too much consideration from any nation, because he is its very foundation, and without him plutocracy and arrogation of temporal power by man could not fail to fall. The powers belonging to God alone cannot be assumed by man without falling within a just retribution from Him who is alone the power.

This is not a sermon, but only a philosophical reflection based upon the well-known teachings of history. What we are doing today in the way of aiding the agriculturalist by irrigation is simply the imitation of what the ancient Chinese, Egyptians and Incas of Peru did. It is nothing new, and gives us scope for thoughtful betterment of ancient conditions supported by what appears to us our better knowledge of engineering.

The irrigation congress has an ample opportunity to place irrigation outside of the influences of political intrigue, and this should materially assist in producing desirable results. A timely suggestion is offered in an able editorial in the *San Francisco Call* as to existing conditions. These, however, are only half considered. It says:

"The expected seems about to happen. When the federal government undertook to provide irrigation in the arid regions, applying thereto the proceeds of the sale of public lands, it was expected by many who had foresight that finally the general fund would be resorted to in order to complete the work that would be undertaken.

"The scheme is nearing that point. It was intended that the settlers on the irrigated land should pay back to the government in annual instalments the cost of the reclamation. That would make a re-

volving fund of the original capital, and would transfer it from completed to new projects. A large number of costly irrigation plants have been put under way, but none has yet returned a dollar to the fund. One reason appears to be that government irrigation plants cost so much per acre of land to be served that settlers are shy about assuming the burden of debt.

"As soon as an irrigated homestead is occupied the debt to the government begins to run on its entire acreage. If the limit of area is 80 acres, the settler has to pay \$240 for water the first year, though he will be doing well if he put up his buildings, fence his land, provide teams and feed for them, get tools and implements and get 20 acres in crop. He will then be using water on 20 acres at a cost of \$12 per acre. The terms and conditions are too hard for the men who seek settlement on land. Those who have on hand the amount of capital required to meet the conditions do not wish to live on land.

"Another objection is that the limit of holdings is too small. A farmer must be a man of family. As the children reach maturity he wants some land to divide among them. A homestead of 80 acres will not serve that purpose.

"The law seems to have been made by men who never underwent the experience of moving onto wild land, subduing it and making a home supported by its produce. In administering the law the Interior Department has spread its legs too wide. It has undertaken a number of very costly plants all at once. It should have completed one, secured settlers on it and had experience to guide it for further work. It is now in danger of a reaction that will be caused by the cost of a large number of incomplete plants and the lack of settlers on the lands that are under the one that is finished."

A few years ago I called the President's attention to this feature, and the correspondence was then referred to a board of reapportionment of federal bureaus. I am confident that this reapportionment would result in a great benefit to the public service as well as the individual farmer, and until that becomes an accomplished fact we cannot hope to reap the natural results of a laudable undertaking that means so much to our nation's wealth.

To deal with irrigation as a concrete proposition is quite different from dealing with it in detail. The work itself offers many opportunities for misdirected energy that it has many hazardous features that should be considered before the enterprise reaches a point where it may prove a detriment rather than a blessing to the farmer and his heirs.

Another error in the consideration of this problem is that so few people actually interested directly take part in the laudable work of the irrigation congress. The excitement is maintained by persons who are actual beneficiaries under the congressional provisions. One may, then, ask the motive of such propaganda.

My skepticism on all so-called "congresses" is aroused not by mere idle vandalism, but by experience. In 1890 a gentleman who lived in New Jersey called at my Washington office and proposed to me as a business venture the organization of "congresses" and societies. He showed

me his books and what could be done by working the public. I cannot but say that his proposition as shown by his books and the apparent luxury in which he lived would have appealed favorably to many persons who had no reputation at stake. His argument was: "You can control a certain portion of the press and I can tell you what to do. Then we can divide!" I could not but refuse, as I considered the proposition dishonest. My own opinion or action has nothing to do with the question, but it is sufficient for me to say that the party in question made a fortune out of the business, although he had to face the courts afterwards.

Of course, I do not dare to impute to the irrigation congress or its promoters any personal aim of gain, but in truth I cannot see the necessity of such an organization, or any similar organization, unless authorized by the federal government or representing the voice of the people actually benefited under the reclamation act elected by the people by primaries.

Reverting to the weaknesses of the irrigation act, I need only call attention to the address of Hon. C. B. Homes during the meeting of the National Irrigation Congress in El Paso on November 1, 1904. Touching the border of the question he says:

"Within six months after the passage of the national irrigation act indications were not wanting that forces were at work which, if not promptly resisted, would entirely pervert the act from the purposes which it had been intended should be accomplished; that is, that the benefits of the act should inure solely and wholly to the actual settler who should make his home on the land. These forces were of two kinds, one of which proceeded from a certain class of land speculators, whose main purpose was to "scalp" the settlers, and the second from parties who have been for a long time securing large tracts of government land for range purposes and getting under their control still other large tracts yet belonging to the government."

Some of my friends will probably say that I am a pessimist, and that I am perpetually finding fault with everything and everybody. Be it so. My only reply is that so long as a man is healthy he does not need a doctor.

The reclamation of arid lands can only benefit the actual settler, who does not exist before the irrigation is an accomplished fact; the landowner, who holds vast tracts for sale when irrigation is completed; the politician, who uses the issue to impress a sensitive constituency, and the government bureau, that gets appropriations by the hurrahs of the national irrigation congress.

I have no opinion of my own on the question, but on reflection it seems that only two sets of parties under consideration can support the expenses of an otherwise worthy agitation. I leave the public to decide who they are.

The reclamation of barren lands is one of the most important features of our national system. It should be in the hands of the Agricultural Department and under the control of an unpartisan board of control. Today a vast national problem is in the hands of a stepfather, but it should be fostered and cared for by a legitimate parent. No one will call me a cynic unless he is either ignorant of the question or has personal ends to foster.

The Buchanan (Ga.) Commercial League has been organized with Messrs. Jesse Beall, chairman; W. T. Evans, vice-chairman, Claude Moore, secretary; C. B. Weatherly, assistant secretary; W. A. McCalman, treasurer; E. S. Griffith, W. R. Hutcheson, A. R. Dodson, W. M. Strickland and Price Edwards, directors.

\*Increase in the number of machines in coal-cutting has been rapid. In 1891, when the total production of bituminous coal in the country was 117,901,338 short tons, and in States and Territories where machines were used 93,177,978 tons, 545 machines cut 6,211,732 tons, or 6.66 per cent. of the total output in such States and Territories. By 1900 the production had increased to 212,316,112 tons in the whole country, and in machine-mining States and Territories to 209,864,639 tons, of which 52,784,533 tons, or 25.15 per cent., were cut by 3907 machines. In 1904 the total production of the country was 279,153,708 tons, and of machine-using States and Territories 273,421,793 tons, of which 78,692,497 tons, or 28.78 per cent., were cut by 7671 machines. Between 1891 and 1904 the total production of the country increased by nearly 137 per cent., of the States and Territories using machines by more than 193 per cent., and by machines by nearly 1167 per cent., the number of machines increasing in the meantime by more than 1307 per cent. The rate of increase in production by machines did not keep pace with the rate of increase in the number of machines, and the average production per machine, which rose from 11,397 tons in 1891 to 13,510 tons in 1900, was but 10,258 tons in 1904. Coal-mining machines in the last-named year seem to have suffered from a complaint similar to that which is affecting human workers in some lines and reducing their productive capacity.



**WEST KENTUCKY COAL.****Important Development in the Neighborhood of Sturgis.**[Special Cor. Manufacturers' Record.]  
Sturgis, Ky., August 30.

The big West Kentucky Coal Co., which recently absorbed all the collieries of moment in this bituminous territory, is not only preparing to build a giant steel storage plant on a large tract west of town, in order that all its mines may be operated without shutting down on account of low water, which is to be the principal mode of transportation, but simultaneously is preparing to lock and dam Tradewater river, a serpentine stream that drains its vast coal field and empties into the Ohio five miles west of Sturgis. The company is to set down over 1,500,000 tons of coal a year at St. Louis, and it is laying its plans accordingly on a big scale.

Another large company has organized, and is in the nature of a merger, to operate near Henshaw, seven miles north of Sturgis, but includes the property of the Bell Coal Co. here and a large towboat company. The Henshaw plant will be within five miles of two other railroads at Shawneetown, Ill., and the building of a short line from Henshaw to that place will give not only a river outlet, but a much lower transportation rate by rail to St. Louis; in fact, this short line is a big coup on the part of the new company, and is a stroke that was apparently overlooked by the West Kentucky Company, which must needs build its own lines and still find no other through system except the Illinois Central, whilst the Henshaw company will have three railroads and the Ohio.

Options have been taken in practically the last slice of Bell coal territory, the boundary line of the bituminous horizon, just south of Sturgis, in Crittenden county, the field lying parallel with the Illinois Central Railroad and bordering on Tradewater river. This is the finest seam in this section, and as the coal can be reached with a drift or slope, the mines can be opened and put on a producing and paying basis for an amount usually necessary to reach the other coals here by shaft. It is proposed to make this a popular stock company, and the management will be in the hands of Mr. C. H. Wilson, a practical and successful operator.

The great fluor-spar, lead and zinc field of Crittenden, the adjoining county to this (Union), is being exploited both by local and foreign capitalists. It is one of the very few districts in the country supplying the demand for fluor-spar. Several of these mines have made fortunes for their owners.

It comes to the MANUFACTURERS' RECORD's correspondent privately, but is authoritative, that the one-time widely-advertised town of Grand Rivers is to go on another tremendous boom—or, at least, the iron-ore interests are to be backed with a capital of \$15,000,000, the furnaces set to work and iron and steel making engaged in. A Pittsburg company is to be at the head of the revival. Grand Rivers is the now "deserted village" between the Cumberland and Tennessee rivers, where Tom Lawson first began his career as a "frenzied financier," and millions were lost in the adventure—not by Thomas, however.

**INTO KENTUCKY COAL.****Railroad Extensions to Develop the Rich Fields.**[Special Cor. Manufacturers' Record.]  
Middlesboro, Ky., September 5.

The eagerness being displayed by some of the big railroad companies in seeking entrance to the Big Sandy coal fields of Eastern Kentucky since the building of

the Chesapeake & Ohio's extension through that field assures an early era of general activity throughout that section. A survey is now being made for an extension of the Lexington & Eastern Railroad from Jackson, Breathitt county, Kentucky, via Perry county to the headwaters of the North fork of Kentucky river and the Elkhorn coal fields of Pike county, a total distance of 65 miles. It is reported that contracts have been made for the construction of 35 miles of this extension. For a number of years such a line has been considered, the Lexington & Eastern people having it in mind when the line was built from Lexington to Jackson, Ky., over 15 years ago. Two corps of engineers are now engaged in relocating old lines made several years ago, and the prospects are bright for the building of the entire extension of 65 miles.

Along the extension of the Chesapeake & Ohio extensive developments are beginning to be made. Several lateral lines are being extended, the most important one being the Marrowbone branch, eight miles in length, to open up property of the Big Sandy Company of Boston, which owns 130,000 acres of Elkhorn coking-coal land. This line will soon be finished, and mines are already being opened up in that territory.

W. S. HUDSON.

**Tennessee-Kentucky Oil Fields.**[Special Cor. Manufacturers' Record.]  
Barboursville, Ky., September 4.

With the beginning of the autumn renewed activity is displayed in several of the divisions of the Kentucky-Tennessee oil fields. An important oil deal has just been accomplished in the Knox county fields, in this State. Detroit capitalists have purchased the properties of the old Big Five and Giant oil companies, and have consolidated with the Last Chance Oil Co. The new concern will retain the name of the Big Five Company, and the two associated concerns are beginning extensive developments in the Southeastern Kentucky fields. The Bluegrass and Standard development companies are also preparing to renew operations in Knox county.

Among the concerns organized during the past few days to begin developments in the upper and lower Kentucky fields are Sterling Oil Co., composed of Lexington people, to operate in Wolfe county; Montgomery Oil Co., to prospect in Montgomery county; Danville Oil Co., and an association of Pennsylvania capitalists to develop proven territory in Wayne county.

During the past week a number of excellent strikes have been made in the two main developments—Wayne and Wolfe counties. In the former field a Lexington concern developed a 125-barrel light-grade producer the latter part of the week, making the best strike in the State for a month. Twenty-four completions of the productive class were made in Wayne county last month, and only six dusters appeared during the same length of time. Contractors in Wayne county and other fields of lower Kentucky are beginning to have a better business. In Wayne county 20 new derricks have been erected lately and the drilling force has been greatly augmented. Down toward the Tennessee line a number of wells have been started around Parmleysville, several of them two or three miles ahead of production.

In the upper Kentucky fields 11 strikes were made in Wolfe county last month, the best one making 60 barrels daily. In the counties surrounding Wolfe several wells have been started lately, and the prospects are for an expansion of the upper Kentucky fields. The New Domain (Standard) has started several new wells in Eastern Kentucky in the Floyd-Knott field. Several good completions have been made there lately.

Developments in Tennessee are confined to a limited area just now. In Fentress county two or three rigs are at work, but no late strikes have been made. Drilling in Putman county is at a standstill.

W. S. HUDSON.

**TEXAN IRON RESOURCES.****Suggestions About the Opportunities in Their Exploitation.**

Editor Manufacturers' Record:

That the iron industry of Texas is destined in the very near future to become of great interest to the investing public is very apparent to those who have given the question any serious thought. The iron interest of the country doubted and scoffed at the idea of Alabama ever dictating prices of pig-iron so long as the iron ores of the North lasted. Yet in a few short years the South virtually names the price of pig-iron in the markets today. As it has been with the Alabama irons, so it will be with the Texas iron. The one great difference in favor of Texas is this—the manufacture of the product of the furnace will not stay away from the Texas iron fields, as it did from Alabama. Conditions have greatly changed; there is more money in the South; the country is being more rapidly developed, thus increasing the demand, capitalists realizing the nearer the factory to the market the greater the profit. Another reason why the Texas iron fields will be eagerly sought after, in addition to the close proximity of a never-failing market, is the unequalled superiority of the iron of this ore belt.

In the Dallas News of a very recent date their special correspondent, in writing of the iron industry operated by the State at Rusk, states that the melted iron is taken from the furnace in large ladles and poured direct into the pipe molds, making water and other piping which stands the required test of some 300 pounds per square inch. Is this done with any other iron? By this direct process a saving of some \$4 per ton is saved in the making of pipe, a good profit in itself. The tensile strength of the iron of the iron belt of Texas is unsurpassed by any other iron. In a test made by parties in Pennsylvania in making tin of this iron it was found that the loss in the process was near one-half less than any other iron. In bulletin No. 260, contributions to the economic geology, United States Geological Survey, Mr. E. C. Eckel makes quite an elaborate report of the iron ores of North-eastern Texas. He makes the comparison with Ore Hill mine of Connecticut, which is the source of the famous Salisbury iron:

Analyses.		
	Average Ore Hill, Texas ore.	Conn.
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ).....	66.39	69.71
Silica (SiO <sub>2</sub> ).....	14.47	9.84
Alumina (Al <sub>2</sub> O <sub>3</sub> ).....	8.17	3.65
Sulphur (S).....	.083	.159
Phosphorus (P).....	.172	.196
Metallic iron (Fe).....	46.63	50.12
Phosphorus in 100 parts iron	.371	.393

In making the comparison Mr. Eckel admits the very superior quality of these ores. He, as well as all others competent to judge, admit without a question the quantity of the ore deposits of this iron district. The quantity in sight is the basis of their conclusions, as no mining exceeding four to five feet has yet been necessary. In ore fields it is not uncommon to find ores where least expected and in quantities not thought of. Therefore it is a safe conclusion to reach that there is ore in this district in quantities to last for years. It is reported that a vein of ore has been found underneath Chattanooga. It is possible this was a surprise to everyone, as well as unexpected. It will be the same in this district. Ores in quantities not thought of will yet be found. There is not the least shadow of doubt on either question, quantity or quality.

The question next most interesting is

the market for the products of an iron industry located at Jefferson. Will the market justify the expenditure of money which will supply the present demand? In that connection I will first call attention to the fact that west of the Mississippi river one-half of the cotton crop is made. Jefferson is in the geographical center of this crop. Suppose it should require 30,000 tons to supply the demand for ties, and only a net profit of \$5 per ton is made; that will equal \$150,000 per annum profit. The advantage Jefferson would offer for a plant is, at least one-third of the trade can be reached by water, thus insuring the cheapest possible freight. The market for cotton ties can be reached direct, with no middleman to get his commission. The situation is such that any kind of competition can be easily met. Investigation can and will prove the above is absolutely true. Then where can another such market be found? The next suggestion is the manufacturing of piping. If Rusk can make a superior grade of pipe by the direct process, then the same can be done here, and if \$4 is saved there, \$4 can be saved here. Neither of these plants would be very expensive, yet each will be great profit-makers. The demand for piping in the great Southwest is constantly growing with each year. The fuel used is charcoal, and by concentrating the making of charcoal at the furnace and in connection with ovens put in a by-product plant, the proceeds from this plant will reduce the cost of the charcoal from 50 to 75 per cent., if not more. In this way charcoal iron can be made at a less price than coke iron, besides being of a superior grade and commanding a higher price on the market.

All one has to do to be convinced on any proposition suggested herein is to make a personal investigation. The demand for all other iron may cease; the trade may come to a stop; money may be tight; in fact, anything of a dire disaster may overtake the country, but nothing but an absolute failure of the cotton crop can and will affect the demand for cotton ties. Nothing stops the sale. The iron is here, the market is here, then why should capitalists hesitate to invest in an industry which has a never-failing and constantly-increasing demand at the very door of the plant. In no other country do such conditions exist.

W. T. ATKINS.

Jefferson, Texas.

**PROTECTION FOR INVESTORS.**

By JOEL HUNTER,

Public Accountant, Atlanta.

Until within comparatively recent years the services of the public accountant have not been utilized by the business men and investing public of the South. With the large corporations the auditor is one of the executive officials, but in many of the business houses and to the large number of more or less credulous investors the idea of a certified statement of profit has not been treated with the value it deserves. To the innocent public who is asked to invest a part of its savings in some financial undertaking the company promoter presents a statement prepared generally by those who, while perhaps honest, are rank optimists regarding the proposed venture. It is beyond reason to expect cold criticism from one who solicits your financial aid and personal influence in the formation of a new enterprise or in the enlargement of one already established. Among active business men the invitation to invest is generally accompanied nowadays with a financial statement prepared by a disinterested public accountant. This idea is carried even further by the great steel trust, which publishes periodically a financial statement certified by a public accountant. The investing public, however,

finds in the public accountant its greatest assurance of safety. His certificate published in a company prospectus gives confidence that the values stated are as represented. In many instances where widely-exploited ventures have come to grief it turns out that the original assets claimed by the promoters only existed in their imagination. This, of course, represents an extreme, but even where the best motives exist in the appraisal of merchandise and other properties there is a wide margin of difference between the seller's value and the buyer's price. Here, then, does the public accountant step in and from a moderate and disinterested point of view prepare his statement, which to all others not at interest may be regarded as more nearly representing the true value.

Mr. James G. Cannon, vice-president of the Fourth National Bank of New York, recently made an address on "Bank Credits" before the New Jersey Bankers' Association. In this address he recommended that applications for loans be accompanied by financial statements prepared by certified public accountants and engineers. He gave as his reason that bankers would reduce the number of their doubtful loans by such a practice.

The wide scope and useful services performed by the public accountant has been well summarized by an eminent member of the profession as follows:

First—The investigation of the accounts of a business concern prior to the investment of capital therein by a purchaser, for the purpose of ascertaining its true financial position and certifying as to its earnings.

Secondly—The annual audit of the accounts on behalf of the stockholders or directors to insure the accuracy of the statements of earnings and to protect the stockholders against errors of principle therein, as well as against frauds, defalcations and clerical error.

Thirdly—The investigation of accounts for the purpose of reorganization or consolidation, or for any other purpose for which accurate results independently verified may be required.

Fourthly—The preparation of accounts of executors, administrators, trustees and receivers in bankruptcy, with special reference to the form in which they should be submitted to the court, beneficiaries or creditors.

Fifthly—The devising and installation of modern systems of bookkeeping and cost accounting suitable to the needs of the business, with special reference to the preparation of comparative summaries of cost and profit at regular intervals.

### Industries at Brenham.

[Special Cor. Manufacturers' Record.]

Brenham, Texas, August 29.

I hear only favorable comments from the many readers of your good journal of the able manner it is edited and the great amount of good you are doing throughout our Southern country in mentioning the many industrial enterprises and the natural advantages we possess and can offer to energetic capital seeking such opportunities. Seeing such notices from other sections of our State prompts me to state that our little city is situated in what we term middle Southern Texas. Our principal money crops are cotton, sugar and rice, all of which do well in this climate, as our rich lands are well adapted to their culture and also to the many smaller vegetables for truck farmers. Our city, though small in population, can show considerable enterprise in other lines of industry. We have a modern equipped cotton factory, iron foundry, two cotton compresses, oil mill, electric and ice plant, three banks and a modern furniture factory, though the latter is at present idle for the simple need of an experienced person to take

charge of its general management. The machinery is new and up to date for all classes of woodwork. The Brazos river, on the eastern border of our country, has as fine hardwood timber as anywhere in the South, and accessible by railroad to the doors of the factory. The owner is desirous of securing the proper man with some capital to take hold of a paying enterprise. The oil fields are nearby, and lignite coal only a short haul, making this a point for cheap fuel, together with an abundance of fine boiler water, giving us an ideal place for all kinds of factory enterprises. Two railroads cross here at right angles, giving us access and competitive rates to all points. An organized company is now boring for oil within 10 miles of us with good indications of success. We welcome all good people from everywhere, and promise them great opportunities.

H. K. HARRISON.

### On Pushing American Trade.

Suggestions to American manufacturers interested in pushing their trade in foreign parts are made in the following letter from a business man in South Africa to an American manufacturer, which the former permitted the MANUFACTURERS' RECORD to see:

"In acknowledging your esteemed favors of July 1 and 7, while I thank you for prompt replies, I beg to ask you to re-read my letter of May 31 and the statement enclosed as to estimates asked for. I am an American, and wish to push American machinery, but such inadequate replies as yours will drive me to patronize English or German houses. In your letter of July 1 you acknowledge receipt of mine of May 31 and say: 'Will in a few days reply to your letter more fully.' As my customer had necessarily waited two months, I showed him your letter and promised more full replies accordingly 'in a few days.' Imagine my disappointment and chagrin when I received your second (presumably more full) letter of July 7, containing simply your charge to me for making sample wares.

"You have absolutely ignored my request for estimated cost of pottery plant described, to be figured in connection with existing brick-making plant. I now have to repeat my plainly explained request and keep my customer waiting two months longer—this notwithstanding the fact that brickyards which have been shut down for the winter (June, July and August in this hemisphere) will be opened up on September 1.

"My customer wished to know approximate cost of the plant he wishes before going to the expense of sending clay to America to have sample wares made. However, I have seen him and I think he will ship you about one ton of clay next week on my offer to share the expense with him.

"Brevity is a good thing, but when a manufacturer is brief at the expense of completely ignoring a dealer's request for information there is very little 'soul of wit' in it for the importer, whose business depends upon the co-operation of the manufacturer. We (Americans) sometimes call the English 'slow,' but let me say that if I had written to an English firm for the information requested from you I would have been furnished with all cuts, blueprints and details necessary for me to intelligently negotiate a sale and give prices without waiting two months more for information asked for in my first letter, and without which any hope of making a sale is futile."

\* During the past 11 months \$742,117 have been expended on buildings in Montgomery, Ala., more than 150 dwellings, costing \$1000 and over, being included

### DEVELOPING THE SOUTH.

#### The Important Part Played by Railroad Companies in the Task.

In an article in the New York Sun bearing upon material progress of the South in recent years, Sylvester Baxter writes:

"The magnificent Union Station at Washington, which will soon be one of the great monumental buildings of that splendid city, has been called the vestibule of our national capital. It might also be called the gateway of the South; that is, for us of the North. On the other hand, for the South it will be the gateway of the North. The South, to be sure, has many gateways along its northern frontier, as is necessarily the case with a boundary line that stretches across the continent. But Washington, from its national rank and its relation to the densest populations, both North and South, is pre-eminently the grand portal of the section.

"In our observations of typical industrial development as influenced by the railways, strong contrasts and most interesting comparisons are offered in proceeding from one old section to another old section; from densely populated New England to the as yet sparsely populated South; from a new section in the extreme part of old New England into many parts of the South where what perhaps are the richest fields of varied natural resources in the world awaiting exploitation. We shall find the same vital American spirit animating both sections, with many notable contrasts and equally notable agreements and parallels. The South, however, is distinguished by a marvelous revival of the spirit that prevailed there of old. Broken by the blight of slavery and of civil war, only in recent years has it regained its old-time momentum. It is now speeding forward to marvelous new outcomes.

"There cannot be the least question as to the fact that the present splendid advance, which marks a new era throughout the South, has been made possible only by the railways in their taking up of the most modern and enlightened methods for the exploitation of the territories tributary to them. The railway development of the South in the antebellum days was very important, and corresponded to like stages of development in the North. In those days, however, the Southern railways, while including many trunk lines of great importance, were broken up into numerous fragmentary sections controlled by as many independent companies. Among these such traffic relations existed as were possible under those conditions. But there was little coherence among them, and equally little possibility of action in unison as demanded by modern traffic requirements. The era of consolidation into great systems began much later in the South than in the North, but the process is now being carried forward in magnificent consummations.

"Railway development in the South, however, is not even half complete as yet. In many parts of the North it has practically attained its full growth. In the South the general conditions may be compared to those of a forest where the trees, although large and flourishing, have yet to double in size, at least, before they realize the possibilities of maturity. There appears to be a general impression that these great consolidations mean practically a monopoly of railway transportation under one control, as has been the result in certain other sections of the country. This, however, is far from the correct idea of the present situation. The South contains several very large systems, one of them already including considerably over 8000 miles of lines. But these overlap and interlace to a very great extent, reaching into the territories of one another and

coming together at various great central points. Therefore, while there may be harmonious relations, there is certainly a great deal of competition for traffic.

"It has been a fashion of late to depict the railways as raging monsters, devouring the substance of the land, delighting in the destruction of industries and blighting the prospects of flourishing communities. While there have been and doubtless still are not a few instances of injustice to individuals and communities, it is evident that the self-interest of a railway system lies in building up the territory along its line without favor or discrimination to its patrons. The ways in which the railways have built up the South in the past few years and are still building it up in steadily accelerating degrees find probably their best illustration in the great work which is being carried out by the land and industrial departments of the various systems and companies.

"There was recently a meeting of the Southern Railway Land and Industrial Agents' Association at Asheville, N. C. In relation to this occasion it was said at the time that until the Southern railroads began a systematic campaign for promulgating information concerning the South there was very little perceptible development in comparison with the newer sections of the United States. But in consequence of the effective work that has been done, a great movement of capital and industry and of population toward the South has taken place.

"Altogether the South is now regarded as the most prosperous section of the United States, and this fact appears to be chiefly due to the systematic work of development which has been carried on by the railroads. How extensive this is may be seen from the fact that the association in question represents 16 different railway companies, whose combined mileage is over 40,000, covering every part of the 10 great States which they penetrate.

"The pioneer in this work of industrial development was M. V. Richards, the land and industrial agent of the Southern Railway. When that great system was created by the consolidation of numerous smaller lines scattered all through the South from the Potomac to the Gulf of Mexico and from the Atlantic to the Mississippi, the president, Samuel Spencer, called Mr. Richards to him and asked him to undertake the organization of a great land and industrial department for the big new company. Mr. Richards had had long training and successful experience in railway work in the far West, and later on the Baltimore & Ohio Railway in a similar capacity under Mr. Spencer. He was told that there would be no disappointment should no results be evident from his work for at least a year, for the management was well aware of the difficulty of the problem that lay with an old and most conservative section of the country, entirely unused to such activities.

"In the work of the department thus established we have one of the most evident benefits from railway consolidation on a vast scale. Unquestionably there is economy in the increased efficiency thus achieved, for the extension of enlightened efforts thereby set on foot for the improvement of communities is thus made applicable to every part of a vast area. No such elaborate activities would be possible for a small railway. \* \* \*

"In many such ways the work is kept close in touch with the entire population with which it has to do. The agent of the land and industrial department acts very largely as guide, philosopher and friend for many hundreds of persons in the communities where he is known. His advice is sought and he is consulted for many purposes, and it is felt that this should be



given friendly consideration. All this, of course, works for the good of the entire public. While it is not corporate philanthropy—the purpose of no great industrial corporation being to do good without reference to financial returns—it has the same result. It is an enlightened self-interest in the line of policy; but among the individuals concerned, both the representatives of the corporation and the members of the community, the most genuine good-will is mutually manifest.

"This work for the Southern Railway, set on foot 10 years ago, soon proved such a monumental success that similar departments have been instituted by all the great railroad companies. These departments have no trade secrets; they feel that what one does in the way of advancing the interests of its own section advances the interest of the entire South. Therefore the work is mutually encouraged and the association of agents has been organized with conspicuous success. One result has been the creation of a new profession in the vocation of the railway land and industrial agent. The existing demand for such services is said to be greater than the supply. The young men who enter the work are enthusiastic over it. They say it is an education in itself in the way in which it brings them into contact with all the varied phases of American industrial and agricultural life and the many processes involved, with which they have to make themselves familiar. Such talent is sought for and is well recompensed. Educated and able young men fill these positions.

"The millions upon millions of dollars that have been added to the wealth of the South by such work are beyond comprehension. While the creation of good railway facilities has been the chief factor in the phenomenal development of the South in recent years, it is evident that but for the work of these land and industrial departments the process of growth would have been immensely longer than it has been."

#### Cotton Weight in Exports.

It was noted in the MANUFACTURERS' RECORD a short while ago, in its review of Southern commerce during the past year, that in the matter of values of exports of merchandise Southern ports as a whole had not maintained the advantage which had been theirs in preceding years. This fact was explained by the extraordinarily small export of wheat from the country generally, and by the comparatively low price of cotton. That point is emphasized as to New Orleans by statistics published in the September 1 issue of the *Times-Democrat*, showing the foreign commercial movement for the 12 months ending July 31. In that time the value of domestic exports was \$153,073,041, an increase over the same period last year of \$4,974,869. That the movement is not absolutely described by mere values is shown by the export of 2,395,518 bales of cotton in 1905 having a value of \$101,771,352, while the export of 1,741,190 bales in 1904 had a value of \$109,739,112. So in the case of imports there was a decline in value from \$34,033,742 to \$33,393,144 in 1905, or \$640,598. But there was a difference in the quantity of sugar imported of 213,806,020 pounds, and in value of \$2,506,663, which is accounted for by the unusually large sugar crop produced in Louisiana last year.

The Chamber of Commerce at Beaumont, Texas, through Secretary H. G. Spaulding, is circulating leaflets describing the rapid but substantial growth of the city, its railroad facilities and its opportunities for industries.

During August 7750 tons of Peace River phosphatic rock were shipped through Punta Gorda, Fla.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### IRONTON TO THE SEA.

**Eugene Zimmerman Will Build a Great Coal Road to Charleston, S. C.**

President Eugene Zimmerman of the Cincinnati, Hamilton & Dayton Railway has announced that the company will build a line from Ashland, Ky., into Pike, Knott and Letcher counties, Kentucky, for a distance of 125 miles to develop 350,000 acres of coal lands lately purchased. The plan has been financed and the construction will cost about \$3,750,000. The line will cross the Ohio river by means of the bridge which is to be constructed by the Ashland & Ironton Bridge Co., a description of which was recently published in the MANUFACTURERS' RECORD.

Mr. Zimmerman also says that it is the purpose of the company to finally secure a through route to Charleston, S. C., by building further southward, by connecting up existing roads and by making traffic arrangements. To do this about 200 miles of new line will have to be constructed.

A press dispatch from Charleston, S. C., indicates that part of the line may be composed of the East Tennessee & Western North Carolina Railroad, the Linville River Railway, the Caldwell & Northern Railroad and the Carolina & Northwestern Railway. These lines may form the new route over the mountains of North Carolina, and would take it as far south as Chester, S. C. From Chester to Camden, S. C., a link of about 30 miles will have to be constructed connecting up with the Northwestern Railroad of South Carolina, which is operated in connection with the Atlantic Coast Line, over which trains will be run by traffic arrangement into Charleston.

The report that the Carolina & Northwestern and Caldwell & Northern railroads will be part of the new route appears to be supported by a letter published in the MANUFACTURERS' RECORD of June 22 last from Mr. J. R. Ervin, chief engineer of the Caldwell & Northern. He wrote that the line is laid with 60-pound steel rail, the roadbed is being substantially built and steel bridges designed for heavy traffic are being used. While an extension from Mortimer towards Tennessee is in progress, surveys have been made from Mortimer to Butler, Tenn., 57 miles, and from Mortimer towards Spruce Pine, N. C., about 52 miles, these being practicable lines over the mountains.

President Zimmerman is also reported as saying that a new line of steamers will be established connecting Toledo, Ohio, with other points on the Great Lakes. This will enable coal to be hauled from Kentucky and delivered to steel manufacturers on the Lakes. It may also result in the establishment of steel mills adjacent to the iron-ore regions near Lake Superior.

The Cincinnati, Hamilton & Dayton Railway is now the parent corporation of the new Great Central Route, which has been formed by consolidating, in addition to the C., H. & D., the Cincinnati, Hamilton & Louisville and the Pere Marquette system in the United States and Canada, making a total of 3644 miles. Russell Harding, formerly vice-president and general manager of the Missouri Pacific, is vice-president of the new system, which is controlled by H. B. Hollins & Co. and allied interests. The line reaches from Ironton to Cincinnati, Toledo, Detroit, Buffalo, Chicago, Indianapolis and Springfield, Ill., and has a perfect network of roads in the southern peninsula of Michigan, extending as far north as Cheboygan, with steamer connection to Sault Ste. Marie and other points.

President Zimmerman is further quoted as saying that the construction of the Kentucky line will give his system freights both ways, coal being hauled north and west from Kentucky and iron ore east and south from Michigan. It is expected that the output of the coal mines will be from 2,500,000 to 3,000,000 tons a year. Construction has begun on the bridge across the Ohio. While the coal line into Kentucky will first be built, plans for the extension to Charleston are well under way, and it is expected to begin construction soon. Coke ovens will be built adjacent to the coal mines, and this will be done immediately. The coal and ore docks at Toledo are being improved.

From Charleston it is reported that two extensive tracts of land in the suburbs have been purchased for the coal station, and an option has been secured for a freight depot at the foot of Calhoun street. Mayor Rhett, P. H. Gadsden and President Thomas Wilson of the Northwestern Railway of South Carolina are said to have been working on the deal for some time. More than \$250,000 have been raised in subscriptions to the stock of the company.

### WESTERN MARYLAND WORK.

**Potomac Valley Division Improvements Include New Bridge Contracts.**

Mr. William B. Hattan, resident engineer of the Western Maryland Railroad Co. at Big Spring, Md., writes the MANUFACTURERS' RECORD as follows:

"The building of the Conococheague bridge is only a part of the improvements now in progress on the Western Maryland Railroad. The old Potomac Valley Railroad from Williamsport to Cherry Run has quite a number of wooden trestles and some heavy grades that would not permit the hauling of heavy trains which will be thrown upon this line when the Cumberland extension of the Western Maryland Railroad is completed, and consequently it became necessary to expend about \$325,000 to improve the line and bring it up to the standard of the Cumberland extension.

"From Big Pool, where the Cumberland extension leaves the old line of the Western Maryland, to Williamsport the principal features of the work will be the construction of three 15 feet concrete arch culverts and two of 10 feet opening, filling seven wooden trestles by tram haul from a borrow pit at Fort Frederick which will require 210,000 cubic yards of material, excavating for grade and alignment changes to the amount of about 350,000 cubic yards, placing 300 tons of cast-iron pipe and the building of concrete piers and abutments for a new girder bridge over the Conococheague at Williamsport.

"This bridge, as well as the arch culverts, will be built for double track. The masonry consists of two U abutments and three piers that will require about 1000 cubic yards of concrete. The tops of piers and bridge seats are 12 feet 2 1/4 inches below the base of rail. The steelwork will be deck girders of 80 feet 6 inches span between centers of track. The alignment is a 4-degree 45-minute curve, and the piers are on a skew of 30 degrees and are about 33 feet high. On top their dimensions are 29 feet 6 inches by 7 feet under coping, with 90-degree breakwater. The Pennsylvania Steel Co. has the contract for the steelwork. The grading, masonry, etc., has been let to Mr. Mike Elmore of Cumberland, Md., who has three steam shovels on the work, with another coming soon.

"Any information about the bridge work would probably be furnished by Mr. C. I. Bosworth, bridge engineer, Cumberland, Md. Mr. J. Q. Barlow of Cumberland is chief engineer."

### BOUGHT A RAILROAD.

**New York Syndicate's Lumber Plans in North Carolina to Be Fulfilled.**

The Suffolk & Carolina Railway, extending from Suffolk, Va., to Edenton, N. C., 50 miles, with a branch of 25 miles to Elizabeth City, N. C., has been sold to the syndicate represented by Rudolph Kleybolte & Co., bankers, of New York, and which, as heretofore published in the MANUFACTURERS' RECORD, is planning a big combination of lumber properties and lumber railroads in North Carolina, including the property of the John L. Roper Lumber Co.

The directors of the Suffolk & Carolina Railway are William H. Bosley, president; J. Hough Cottman, vice-president; John S. Gittings, secretary; Charles F. Pitt, Jr., treasurer; A. H. Rutherford and John M. Dennison of Baltimore, and Chas. H. Tilghman of Kent county, Maryland. Middendorf, Williams & Co., William C. Seddon & Co. and Douglas H. Thomas of Baltimore, and John L. Williams & Sons of Richmond, Va., are also interested in the property. The owners also control the Gay Manufacturing Co., having timber lands along the railroad. The deal represents about \$1,500,000, and the purchasers take the railroad subject to an issue of \$800,000 of first mortgage bonds and \$250,000 of income bonds.

It is further reported that the syndicate has also bought the Pamlico, Oriental & Western Railway, now under construction from Newbern, N. C., to Bayboro and other points in Pamlico county, and a line about 130 miles long will be constructed to connect the properties. The total investments by the syndicate to carry out its plans will, it is said, amount to about \$5,000,000.

### Oklahoma City to Sulphur.

[Special Cor. Manufacturers' Record.]

Davis, I. T., September 1.

Work on the Oklahoma City, Lexington & Sulphur Springs Electric Railway Co. has commenced, both at Sulphur and Davis, I. T. This line is one of the most important electric lines in the Southwest. The line from Oklahoma City to Sulphur, the government reservation, will be 84 miles long, and will cost over \$3,000,000. It will develop a large section of country tributary to Norman and Lexington, Oklahoma, and the towns of Pauls Valley, Wynnewood and Davis in the great Washita river valley in the Chickasaw Nation, I. T. The road will have many small stockholders along its line. Davis alone subscribed \$12,500, and other towns in the Washita valley took still more stock. It is believed that more than \$100,000 has been subscribed by citizens of towns through which the line will pass.

There are many new industrial enterprises under consideration. Several large brick and stone business blocks are soon to be built at Davis and Pauls Valley. The Commercial Clubs of these towns are wide-awake to all kinds of new business enterprises, and are ever ready to grant any privileges possible. Any manufacturer looking for a location will find the Washita valley a profitable field for investment and business location.

### Fourche River Line.

Mr. F. H. Hartshorn, president of the Fourche River Valley & Indian Territory Railway Co., writes from Fourche (P. O. Esau), Ark., to the MANUFACTURERS' RECORD as follows:

"Our road, the first 10 miles of which are already completed, starts at the town of Esau—railroad station Fourche—and runs in a southeasterly direction for about nine miles, and this is the portion that is built. From there we propose to build to the county line of Perry county at a point

about two miles south of Jennings' Falls. Our equipment at the present time consists of two locomotives, 50 logging cars and five flat cars, to which we will add passenger cars and box cars, and expect to have trains running on schedule time for the distance already completed about October 1.

"The total length of our line will be about 44 miles, and it will open up a new country, for it is south of the Fourche in Fave river. Our only connection will be with the Choctaw division of the Chicago, Rock Island & Pacific Railway at present, but expect there will be another road to the west with which we will connect.

"We have not secured our engineer as yet, nor do we know whether we will contract the work of building or do it ourselves. We expect to buy some additional flat cars, box cars and passenger cars very shortly."

The officers of the line are F. H. Hartsborn, president, Fourche, Ark.; N. P. Bigelow, first vice-president, and L. T. Walker, second vice-president, both of Chicago, Ill.; Charles Neimeyer, secretary and treasurer, and Peter Dukelow, superintendent, Fourche, Ark.

### BALTIMORE & SOUTHERN.

#### Reported Deal to Build the Long-Projected Line to Drum Point.

A deal is reported closed for the sale of the Baltimore Southern Railroad charter and franchises to L. M. Shute of Shute & Arnold, 150 Nassau street, New York, who, it is said, will build the line. This proposed road, formerly known as the Baltimore & Drum Point, will be about 80 or 100 miles long. For several years the franchises have been owned by Edward Lauterbach of New York, and although a little work was done some time ago, the proposition has since been at a standstill.

It is also said that Colonel Shute will buy the Washington, Potomac & Chesapeake Railroad, a line running from Brandywine, Md., to Mechanicsville, Md., 21 miles, the latter being owned by Henry W. Watson, 905 Girard Trust Building, Philadelphia, who is the president of the company. The latter has lately projected an extension to Esperanza, Md.

Colonel Shute's plan, it is reported, is to consolidate and connect the two roads and to carry out his object an expenditure of about \$1,500,000 will be necessary. It is also said that a large manufacturing plant costing several millions of dollars will be built at Point Patience or Drum Point, Md.

### A Maryland Electric Railway.

The Frederick & Middletown Electric Railroad, extending from Frederick, Md., to Middletown, Md., 13 miles, has been purchased by the Baltimore & Frederick Electric Railway Co., which proposes to build a line from Baltimore to Frederick, 51 miles.

President James E. Ingram, Jr., of Baltimore says that construction may begin within a month, engineers having finished the location surveys and practically all the rights of way having been secured. The line will be built for high speed, with a maximum grade of not over 1 per cent. When this line is completed there will be a complete electric railway from Baltimore, Md., to Hagerstown, Md., 75 miles, as the Frederick & Middletown Railway connects with the Hagerstown Electric Railway at Hagerstown.

Part of the plan is to improve Brad-dock Heights, near Frederick, and to make it a large excursion resort.

### Mobile, Jackson & Kansas City.

Mr. T. F. Whittelsey, general manager Mobile, Jackson & Kansas City Railroad Co., writes from Mobile, Ala., to the MANUFACTURERS' RECORD as follows:

"Owing to quarantines and inability to secure attendance of the governors of Alabama and Mississippi, the arrangement for the celebration of the completion of the Mobile, Jackson & Kansas City Railroad have been cancelled."

The line extends from Mobile through Mississippi to Midland, Tenn., 403 miles. It runs through forests of pine timber and touches Hattiesburg, Laurel, Newton, Philadelphia, Ackerman, Houston and other towns in Mississippi. It was recently reported that the company would build a line to Birmingham, Ala., but President Robinson is quoted as saying that such an extension will not be made at present or in the near future, as the company is devoting its attention to perfecting the line just built.

### STILWELL'S ORIENT LINE.

#### Rushing Construction From Kansas City Down Into Texas.

A press report from Kansas City says that the Kansas City, Mexico & Orient Railroad is making a determined effort to have the line in operation from Kansas City to Sweetwater, Texas, 634 miles, by January 1. Tracklaying is now going on at five different places between Kansas City and Sweetwater, and practically all of the roadway from Sweetwater to a connection with the Santa Fe at Ellinor, Kan., is graded.

The railroad is now in operation from Wichita, Kan., 160 miles south and for a distance of 50 miles north of Sweetwater. The track is laid north from Wichita to Eldorado, and tracklaying is progressing rapidly between Eldorado and Ellinor. The Santa Fe and Missouri Pacific track will be used from Ellinor to Kansas City.

### Pineville to Monett.

Mr. James A. Sturges, president of the Pineville & Northern Railway Co., writes from Pineville, Mo., to the MANUFACTURERS' RECORD that the company has been chartered to build a line about 40 miles long from Pineville to some point on the Frisco system, probably Monett, Mo. The road will run through a region that is mostly under cultivation and one of the most productive in the State. The uncultivated portion contains timber and stone, and possibly various minerals. Steps are now being taken to make a survey, and it is hoped to soon have the proposition in shape for financing and construction. The other officers are Oakley St. John, vice-president, Pineville, Mo.; John B. Christensen, general counsel, Commonwealth Trust Building, St. Louis; A. W. Noel, secretary, and E. E. Coffee, treasurer, both of Pineville.

### Electric Railway and Power Plant.

Mr. John L. Ray of Albertville, Ala., informs the MANUFACTURERS' RECORD that the North Alabama Railway, Light & Power Co. proposes to build a railway, starting at or near High Falls, at Elrods Mill, in De Kalb county, and running to Albertville, Boaz, Whitesville, Attalla and other points. This will require the construction of at least 30 miles of line. The company will also build water-works and electric plants and will sell power. The officers are J. G. Elrod, president; W. A. Elrod, vice-president and business manager; W. M. Coleman, secretary; T. B. McNaron, treasurer. These, with George M. Rains, constitute the board of directors.

### Augusta & Florida Built.

It is reported from Augusta, Ga., that the completion of the Augusta & Florida Railroad is announced. The line is 30 miles long from Keyville, on the Augusta Southern, to Midville, on the Central of Georgia main line, where it connects with the Midville, Swainsboro & Red Bluff

Railway, which is 20 miles long, giving connection through to Swainsboro, on the Stillmore Air Line, which affords further connection southward to Stillmore and Collins. The completion of this line gives a shorter route from Augusta to several important county-seats and other towns in Eastern Georgia.

### Town Creek to Stuart's Knob.

The Vaughan Construction Co., Inc., contractors, of Roanoke, Va., write the MANUFACTURERS' RECORD as follows: "Contract was awarded us on the 26th ult. for the construction of 12 miles of railroad from Town Creek, on the Winston-Salem division of the Norfolk & Western Railway, to Stuart's Knob, in Patrick county, Virginia.

"This contract was let by the Virginia Ore & Lumber Co., who are building for the purpose of developing valuable ore and lumber properties belonging to them."

### Big Freight Yard.

Construction is reported begun on the new freight yard of the Atlantic Coast Line at South Rocky Mount, N. C., the contractors being Phillips & Allport of Richmond, Va. The yard will have a capacity of 3000 cars, and will, it is said, be the largest yard east of the Mississippi and south of Washington excepting the yard of the Illinois Central in Louisiana. There will be 32 miles of track in the yard, and in the classification portion there will be 20 parallel tracks.

### Railroad Notes.

Mr. Frank P. Read of P. M. Johnston & Co., railroad contractors, writes from Mexia, Texas, to the MANUFACTURERS' RECORD confirming the report that they have begun work on the extension of the Trinity & Brazos Valley Railway from Mexia to Houston, Texas. P. G. Burns is chief engineer, with headquarters at Mexia.

A letter from Pauls Valley, I. T., to the MANUFACTURERS' RECORD says that articles of incorporation for the Pauls Valley & Coalgate Railroad are in the hands of local attorneys. This proposed line will connect Pauls Valley with coal mines, and will also open up a rich agricultural region lying between the Santa Fe and the Frisco railroads. The backers of the line are not yet known.

Mr. George V. Green, member of the State of Kentucky prison commission, writes the MANUFACTURERS' RECORD saying that it is proposed to build a spur track about a mile long to connect the Kentucky Branch Penitentiary at Eddyville, Ky., with the nearest station on the Illinois Central Railroad. This line may be operated by either electricity or steam. Surveys and estimates are being prepared preliminary to asking an appropriation from the legislature which will meet in January.

### The Labor of Negroes.

Sellers, Bullard & Co., manufacturers of naval stores, of Pera, Ala., write to the MANUFACTURERS' RECORD as follows:

"We have been working negroes for the last 10 years, and our experience is that they get worse every day; they are less reliable; for their contract they do less work, and they manage to be as inefficient as possible in the work that they do. We are short of labor, and have been for the past five years. The only way we know to improve the negro is to cut off one-half the amount of money we are paying him; that will force him to work more in order to earn a living. We do not know anything about Italians, but we think it is only a short time before something will have to be done or the naval-stores business in the South will end."

## FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

### For the Argentine Republic.

Antonio R. Estela, Buenos Ayres, Argentina:

"I recently began making some small sales from North America directly to my clients, and it is my wish to continue buying and selling directly from the United States, for I have a large number of customers in this republic throughout the provinces and colonies. If I could find a house which would make me its sole agent for the Argentine Republic I would take a most active interest. The articles which I sell are motors and boilers, wagon-makers' machinery, carriages, carriage hardware, axles, springs, wheels, turpentine, etc. I always sell for account of others, but I would like to sell on my own account or as an agent. If I get a good proposition in the above lines I can do good work. I also engage in advertising North American products for the purpose of getting goods before the public, and in furnishing for them certificates of the principal engineers of this republic."

### Iron Pipes for Sweden.

Heinr. Ahrens, Stockholm, Sweden:

"I am open to business connection with a first-class American manufacturing firm of wrought-iron pipes for gas, steam and water at the base of wholesale representation for Sweden. I should like to come into connection with a firm willing to supply large quantities of wrought-iron tubes c. i. f. our principal ports in Sweden, and willing to sell at the prices of the English standard list with discount. The firm in question should be a large one. If you could bring me into connection with some good first-class firm in this trade I should feel greatly obliged."

### Metal Goods for Russia.

Dmitri Lichatschew, machinery and plumbing supplies, Odessa, Russia:

"I beg you to favor me with addresses of some substantial firms handling the following lines:

"Lamps for benzine or petroleum for soldering all kinds of lead and brass piping; automobiles of various kinds; every kind of brass fittings for steamers and for other purposes; fish hooks and fishing tackle; zinc in pieces and dairy machinery and apparatus.

"Please write me in German."

### Interested in Southern Products.

Rueb & Gleichman, import and export commission, Rotterdam, Holland:

"Of late our business interests have turned to the products of the Southern States of your country. We are interested in peanuts, rice and its products, molasses, cotton-oil products, long-leaf yellow pine, turpentine, resin, chestnut and other hardwoods."

### Wants Dried Fruit.

Ernest Hugo Roehl of Hamburg, Germany, says:

"I would be pleased if you will give me the names of reliable packers or shippers of evaporated ring-cut apples, sun-dried apples and other sorts of California dried fruit, as I have a very large outlet during the whole year."

The Business Men's League of Felsen-thal, Ark., has been organized with Messrs. T. A. Gibson, president; V. L. Webb, vice-president; C. A. Berry, secretary, and G. A. Pryor, treasurer.



## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

### Another Mill at Concord.

Another cotton factory will be built in Concord, N. C., where there are already a number of prosperous industries of this character. The new company has been chartered as the Young-Hartsell Company, with capital stock of \$75,000, which has been subscribed, and privilege of increasing to \$200,000. Permanent organization has been effected with R. S. Young, president; P. B. Fetzer, vice-president, and J. L. Hartsell, secretary-treasurer. The directors are Messrs. Young, Fetzer and Hartsell, A. J. Yorke, W. C. Houston, C. W. Swink, B. E. Harris, W. W. Flowe and J. W. Cannon, all of Concord; B. C. Eley of Baltimore, Md., and C. W. Johnson of Charlotte, N. C. The company has purchased 60 acres of land, which will be used as site for the enterprise, and active construction work will begin soon on a modern one-story mill building 125x225 feet in size. The machinery will consist of an equipment for spinning yarns, and in the future the company intends to add looms and weave its yarns into cloth. Electrical power will be used to drive the textile machinery.

### Lowell Cotton Mills.

Several months ago reference was made to the Lowell Cotton Mills of Lowell, N. C., as having decided to expend from \$30,000 to \$40,000 for erecting 28x185-foot addition and installing 2000 spindles. The construction work has since been completed, and during the past week the contractors for the machinery have been engaged in putting the new equipment in position. The Foster Machine Co. of Westfield, Conn., is furnishing the cone winders and the Howard & Bullough American Machine Co. of Pawtucket, R. I., is furnishing the 2000 spindles and accompanying apparatus. This will increase the Lowell mill to about 8000 spindles, producing yarns in warps and skeins.

### National Hosiery Manufacturers.

It is proposed that the next meeting of the National Association of Hosiery Manufacturers, known formerly as the Southern Association of Hosiery Manufacturers, shall be held at Philadelphia in the second week of November. In a circular letter sounding the members as to their wishes about the time and place of the meeting the president of the association makes a practical plea for increased membership. The officers of the association are Messrs. Harold Lamb of Union Point, Ga., president; J. P. Cannon of Albemarle, N. C., and John M. Jones, Jr., of Sweetwater, Tenn., vice-presidents, and C. B. Carter of Knoxville, Tenn., secretary-treasurer.

### American Press Cloth Co.

Two weeks ago the MANUFACTURERS' RECORD presented details regarding the organization of the American Press Cloth Co. and the press-cloth mill to be built at Columbia, S. C. It is of interest to add that the construction work on the buildings, for which contract was awarded to George Waring, will begin at once and the machinery to be installed will have a daily capacity of from 600 to 800 pounds. Especial attention will be given to the requirements of buyers as to weave, thickness and width desired, also as to grade of cloth. The company's capital stock is \$50,000.

### The Globe Manufacturing Co.

The proposed company of W. M. Webster of Gaffney, S. C., has applied for incorporation under the title of the Globe Manufacturing Co., with a capital stock of \$200,000. Officers and engineer in charge of construction will be named in the near future. As stated last week, the company intends to build for an equipment of 4000 spindles to manufacture coarse yarns, probably Nos. 14 to 20; output about 16,000 pounds weekly. The incorporators named in the application are Messrs. W. M. Webster, A. N. Wood, D. C. Ross and W. A. Turner of Gaffney.

### The Rockwood Mills.

The Rockwood Mills of Rockwood, Tenn., which was referred to some weeks ago as incorporated, has effected permanent organization, electing J. F. Tarwater, president; Sewell Howard, vice-president; John Boyle, treasurer, and Bruce M. Redmon, secretary. Garnett Andrews of Chattanooga, Tenn., will be general manager. The company plans, as stated previously, to erect a 150x250-foot building and equip it with 200 knitting machines. Construction work is to begin soon.

### Memphis Cotton Receipts.

The Memphis Cotton Exchange, through Mr. Henry Hotter, reports that during the year the receipts of cotton at that city were 396,913 bales from Mississippi, 319,709 from Arkansas, 145,571 from Tennessee, 81,952 from Oklahoma, Indian Territory and Texas, 28,175 from Missouri and 11,284 from Louisiana and other States, a total of 983,604 bales, an increase over last season of 234,763 bales.

### Soft-Yarn Mill Contemplated.

A movement is on foot at Cornelius, N. C., for the establishment of a mill to manufacture soft yarns. It is planned to erect a modern mill structure to be equipped with 2000 spindles and obtain power from the Cornelius Furniture Co., a local enterprise with a surplus of power available. It is probable that a company will be organized soon.

### To Rebuild Woolen Mills.

The Jackson Woolen Mills of Jackson, Tenn., was destroyed by fire last week, the loss amounting to about \$100,000. The company manufactured woolen cloth and made overalls, trousers, shirts, etc., from its weaves. It intends to rebuild the plant, and will at once begin arrangements to that end.

### Will Want Mill Equipment.

The MANUFACTURERS' RECORD is informed by W. S. Dustin of Lawrenceburg, Tenn., that he will soon be in the market for a 10,000-spindle equipment for a cotton-yarn mill. It may be presumed that Mr. Dustin plans to build a plant of this capacity or to form a company for the purpose.

### Southern Soft-Yarn Spinners.

At a meeting of the Southern Soft-Yarn Spinners' Association at Atlanta last Saturday an address was made by Mr. William Whittam, Jr., of Charlotte, N. C., on the outlook for sales of yarns in foreign ports.

### Textile Notes.

The Edenton (N. C.) Cotton Mills has declared a semiannual dividend of 3 per cent.

The Spray (N. C.) Woolen Mill is now installing its new shearing machine, a cloth press and a hydro-extractor.

A considerable quantity of braided cotton rope is being shipped from New London, N. C., every week. The Tucker & Carter Rope Co. of that city contemplates building another rope mill. Its present mill has 300 braiders and 250 twisting spindles.

## COTTONSEED

### The Cotton-Seed Market.

[Special Cor. Manufacturers' Record.]  
New York, September 5.

The market for cotton oil has undergone little if any change since date of our last letter. The close of August, however, witnessed unsteadiness, due to certain changing conditions which were unavoidable. As previously indicated in our market review, the leading cotton-oil refining interest, true to the stand it had taken in support of the market, both with regard to prices for spot oil, September and early October deliveries, purchased spot and all the oil offered until the close of the last day of August. With this support suddenly withdrawn, the opening of the month witnessed a reaction, which date being delivery day for a number of September contracts, this, too, having a deterrent effect, a weakness developed, which, however, became less in evidence as the week advanced. The market would appear to have assumed a waiting aspect, while the tone is slightly in favor of buyers, but not until reliable new crop and foreign cotton oil market news are in possession of the trade can a fairly accurate forecast of the future of cotton oil be made.

The home markets for fats are encouraging, especially lard, which is not only holding its own, but is steadily advancing. Regarding foreign cotton-oil matters it is deserving of note that English linseed oil is weak and declining. When the latter drops to a competing basis with cotton oil with regard to soapmakers' requirements, the former is always preferred. Linseed oil has for many generations been held in high regard as a soapmaking ingredient by the British soap trade, and not until cotton oil made its merits known was its position in this respect disturbed. However, this state of affairs could not exist on this side of the Atlantic, for the reason that while linseed-oil mills in the United States are operated mainly for the use of the oil, linseed-oil mills are operated in Great Britain for the use of the cake. While exports of the past year have reached a higher plane in volume than at any previous period of the trade's history, there are not wanting signs of considerable new business, especially with regard to edible oils, while a fair business prevails currently at firm prices.

The mainstay of the market at the moment, however, is the home demand, and while compounders are just now quiet, advancing lard is naturally increasing the interest in compound lard, a big demand for cotton oil for this product being expected as a result. It is clear that while offerings of new-crop oil have been made, with pressure to sell, coming at a critical time and exercising a depressing tendency, this disposition is far from general. It is also a hopeful sign, especially from the crude-mill standpoint, that the mills are not willing to risk new contracts with an uncertain seed market prevailing, and, after all, upon which latter the future of the trade depends. For winter and other high-priced oils sales were made aggregating 4000 barrels at from 31 to 33 cents. Sales to Western compound-lard manufacturers during the week barely reached 5000 barrels, and these were at 28 to 28 1/4 cents for the bleaching quality. Sales of Texas crude have been reported as low as 22 1/2 cents, but the market stiffened later, when 23 1/2 cents was readily obtained, although before this latter price was reached a number of sales were reported at prices ranging from 22 1/4 to 23 1/2 cents. At this latter price up to 20 tanks of crude were sold in the Southeast, but 24 cents is now the asking price.

The following sales were also reported:

Spot oil, 5250 barrels at prices ranging from 30 1/4 to 30 3/4 cents; for September, 4100 barrels at from 30 1/2 to 30 3/4 cents; October, 500 barrels at 31 cents; November, 500 barrels at 31 cents, 350 barrels at 31 cents; January, 1500 barrels at 30 1/2 to 31 cents, and a sale for May, 1500 barrels, at 30 3/4 cents. A sale of oil, white, 1000 barrels, prompt delivery, at 32 cents, was made.

Receipts for the week amounted to 8900 barrels, which indicates that from now on the supply will be increasing, while stocks held by speculators are being liquidated. The following were closing quotations: Prime crude in tanks Southeast, 23 1/4 to 23 1/2 cents; prime summer yellow, September, 30 cents bid, 30 1/4 cents asked; October, 30 1/4 cents, 30 3/4 cents asked; November, 30 1/4 cents, asked 30 1/2 cents, with similar quotations for December and January; prime winter yellow, 32 1/2 cents; prime summer white, 32 1/2 cents. Refined cotton oil, Hull, is weak and declining, 17s. 4 1/2 d. being quoted. The market for cake and meal, Liverpool and London, is steady at 46 5s. for next two months' delivery c. i. f. steamship, with prices unchanged at Memphis and New Orleans. City lard is quoted at 8.30 cents, and compound lard at 5 1/2 to 6 cents. Tallow, city make, is strong at 4 3/4 to 4 1/2 cents.

### Planning Oil Refinery.

Mr. W. H. Madden of Yazoo City, Miss., who is promoting the establishment of an independent oil refinery at some point in Mississippi, announces that the plans for the enterprise are progressing and will be steadily pushed until the plant is established. Much of the capital necessary to assure the successful launching of the project has already been subscribed, and it is hoped to have the plant in operation in time to handle the output of the independent oil mills during the season of 1906-1907. The committee having in charge the preliminary details are now making inquiries as to the cost of necessary machinery, etc., and it is stated will be ready during the latter part of the year to receive site proposals. The Mississippi Crushers' Association, organized at Jackson some time ago, is fostering the movement, which will involve an outlay of between \$300,000 and \$500,000.

### Cotton Condition Estimate.

The Atlanta Utility Works, Inc., of East Point, Ga., estimates from returns made by managers of more than 750 cottonseed-oil mills that the average condition of the cotton crop on September 4 was 17.5 per cent. less than at the same date last year for the whole South, and that the decreases by States and Territories were as follows: Arkansas, 24 per cent.; Alabama, 16 per cent.; Georgia, 15 per cent.; Louisiana, 37 per cent.; Missouri, 10 per cent.; Mississippi, 27 per cent.; North Carolina, 28 per cent.; South Carolina, 18 per cent.; Florida, 10 per cent.; Tennessee, 30 per cent.; Texas, 11 per cent., and Oklahoma, 8 per cent. The condition in the Indian Territory is 6 per cent. better than last year. The estimate of the Agricultural Department, issued September 6, gives the average condition of the crop on August 25 as 72.1, compared with 74.9 on July 25, 1905; 84.1 on August 25, 1904, and a 10-year average of 73.

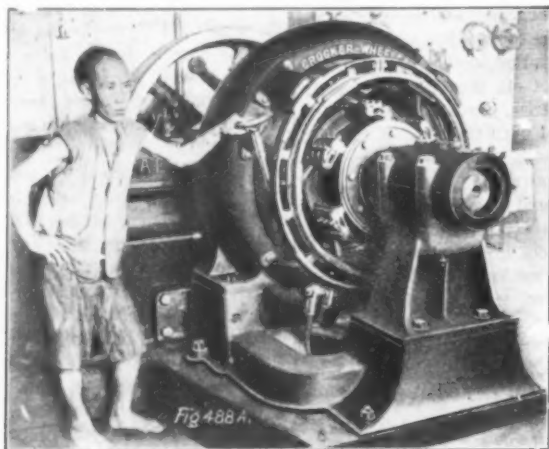
N. B. Kendrick of Cherryville, N. C., is mentioned in connection with plans for organizing a cotton-mill company in that town. Northern capitalists will be stockholders in this organization.

It is proposed to organize a stock company to establish a knitting mill at Dunn, N. C., and T. C. Young of the Dunn Banking Co. is understood to be interested in the enterprise.

## MECHANICAL

### American Dynamos in the Orient.

The accompanying photograph, taken in the power plant of the bureau of public printing at Manila, P. I., was furnished by Earl L. Tatum, electrical engineer in charge. The plant includes two standard 50-kilowatt Crocker-Wheeler electric generators. One was installed last year and



CROCKER-WHEELER DYNAMOS IN MANILA, P. I.

the other in 1901. It is significant of the simple design of these machines, that, after being shipped halfway round the world, they may be operated by natives whose mechanical experience seldom comprehends anything more intricate than a wooden plow.

The native shown in the picture is quoted by Mr. Tatum as saying, "Me saber Crockerne-Whelme elec tricidad maquina," which, roughly translated, means "There's nothing I don't know about Crocker-Wheeler machines."

The Crocker-Wheeler Company of Amherst, N. J., manufactures the dynamos mentioned.

### Making Sand-Lime Bricks.

There is unusual activity at present in erecting buildings in all parts of the country. This is increasing the demand for building materials, and a new product in great demand because of its special advantages is the sand-lime brick. There are

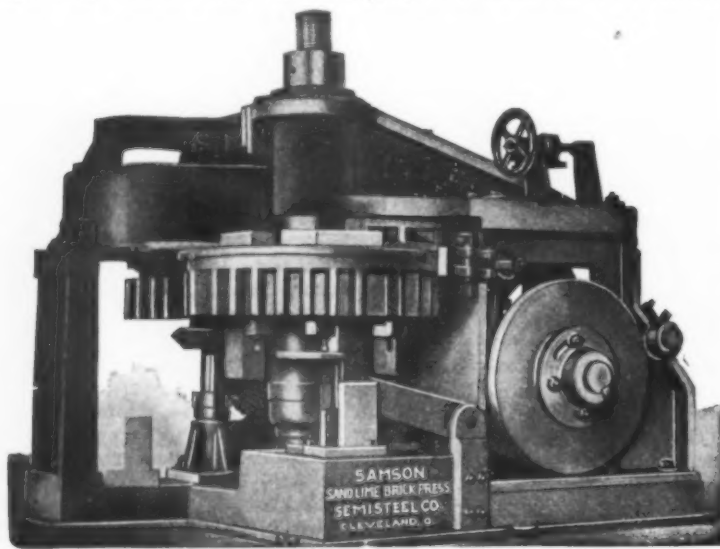
after the Ohlemacher system. It states that "anyone possessing a seashore, river shore or sand bank should engage in the manufacture of sand-lime brick. This kind of brick is destined to take foremost place in the building material world, supplanting ordinary red clay brick, because of its cheapness, ease and simplicity of manufacture, and peculiar fitness for building purposes due to its durability and good appearance."

"In the old method 10 or 12 days in the kiln were necessary, whereas in our method a brick of uniform color, shape and size, and adapted to any purpose that standard red clay brick is, can be made in 10 to 14 hours. The bricks made one day are ready to be laid in a wall the next."

"It has been proved that the action of water and air, heat and cold, complete more thoroughly the chemical combination of the sand and lime and make the brick stronger. Frost and all kinds of weather do not affect it in any way."

"In a building erected several years ago of sand-lime bricks the rooms now are perfectly dry and the brickwork has become harder, especially where exposed to moisture, which proves that hardness increases with age and moisture, due to chemical action."

"The mixing, measuring and grinding of the constituents in our machinery are done automatically without handling. The prepared brick material is fed automatic-



PRESS FOR SAND-LIME BUILDING BRICKS.

many communities where sand-lime bricks are not made and where plants for the purpose can be established with large profit to their owners. When doing this it is necessary to be careful in selecting the mechanical equipment to be used. People who are investigating the facts can obtain valuable information by addressing the Semisteel Company, offices in New England Building, Cleveland, Ohio. This company builds sand-lime brick machinery

ally to a heavy specially-constructed press, which forms the bricks and delivers them on the top of a revolving table, from where they are picked off by hand and placed on cars and taken to a large chamber, where they are finished by being subjected to moisture, heat and strong steam pressure.

"The cost of making bricks by our process is surprisingly low."

An accompanying illustration presents a view of the company's press.

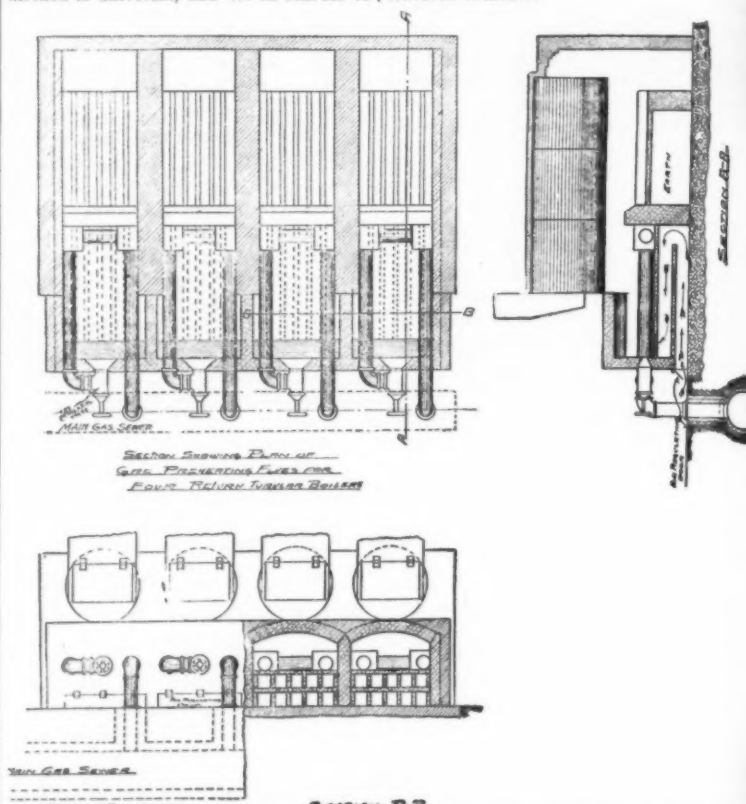
For a complete three-press plant, 27,000 capacity in 10 hours, a building is required 50x135 feet with 14-foot posts. The brick are taken outside and not protected from the weather, even in winter. Write the company for further data that will serve to show the opportunities in sand-lime brick manufacture.

### The Harder Gas Furnace.

The method of firing steam boilers by feeding coal into a furnace underneath requires much work and care to keep up a regular supply of steam. Progressive steam engineers realize the imperfections of that method, and are looking for a better, cleaner and cheaper way. Fuel experts have tested and demonstrated the feasibility of converting the combustible qualities of coal into gas known as "producer gas." This gas is already in economical use in iron and steel furnaces, where regular and intense heat is required. Fruitless efforts have been made to burn "producer gas" under steam boilers. The demand for a clean, economical, smokeless method is universal, and W. L. Harder of

strated by actual tests before competent engineers at the Birmingham Rolling Mills, the superintendent of which says boilers using the Harder furnace were forced over 10 per cent. past their rated capacity with 30 per cent. less fuel than was formerly used in bringing them to their normal capacity, and moreover, that the combustion was smokeless. Another tribute is by J. Wilkinson of Birmingham, the inventor of the Wilkinson steam turbine, who attended tests at the Birmingham Rolling Mills and expressed himself in terms indicating that the invention is all that Mr. Harder states. An accompanying illustration presents a sectional view of the Harder Gas Furnace as applied to four return-tubular boilers.

The Harder furnace can be used everywhere steam boilers are used, whether on land or sea. Besides the saving in consumption of fuel, less labor is required, boilers last longer, and there is complete absence of smoke. The cost of installation is said to be extremely low as compared with the economies and other desirable features obtained.



THE HARDER GAS FURNACE APPLIED TO FOUR RETURN-TUBULAR BOILERS.

Birmingham, Ala., presents a method of burning producer gas under steam boilers which he states will meet all demands. Mr. Harder has had an experience of many years in Pennsylvania, the West and the Birmingham district as a fuel expert as applied to steam boilers and rolling-mill work. He realized the demand for such an equipment and has invented the Harder Gas Furnace, protected by United States patent issued June 27, 1905.

The furnace is ingeniously and scientifically constructed under the boiler, and takes the place of the ordinary furnace into which coal is fed. The gas is conveyed to the boiler from the producer in overhead pipes or underground sewers, as the case may require. It passes through flues so arranged in the firebox as to bring it to a high temperature before entering the combustion chamber. A regulated supply of air circulates through conduits made of refractory material, and it also is brought to a high temperature before entering the combustion chamber. Being thus intensely preheated, the gas and air commingle in the combustion chamber, and the result is perfect combustion, regular intense heat and absolutely no smoke.

Mr. Harder's claims have been demon-

The Harder Gas Furnace Co., offices in the Title Guarantee Building, Birmingham, Ala., is introducing the new equipment. J. M. Dewberry is the manager in charge, and will furnish further details and any further information desired by boiler users who contemplate increasing the efficiency of their plants and at the same time economizing in the cost of fuel.

The MANUFACTURERS' RECORD is informed by the imperial German consulate-general, Postoffice Box No. 658, New York, that it has on hand for free distribution, on the payment of express charges, a limited number of copies of the official catalogue of the German Empire's exhibit at the St. Louis Exposition. Besides the catalogue of exhibits proper, the publication, which contains more than 500 pages, has a great variety of introductory articles written by men of prominence in their several professions on trade, industrial and economic conditions in Germany, freely interspersed with historical and statistical data. The catalogue also carries a register of German firms.

The assessed value of real estate in Richmond, Va., is \$49,137,914, an increase of \$8,208,392 since 1900.



### Jeffrey Finger-Tray Elevator.

The two accompanying illustrations show the lower end of a finger-tray elevator installed in the wholesale grocery store of Hulman & Co. of Terre Haute, Ind., by the Jeffrey Manufacturing Co. of Columbus, Ohio.

This elevator is about 90 feet centers, and is used for elevating and lowering miscellaneous packages, boxes, bags, etc., the

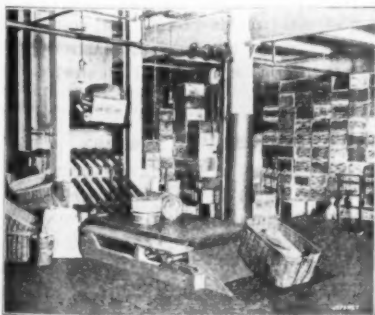


JEFFREY FINGER-TRAY ELEVATOR.

variety of which is shown by the illustrations.

It is constructed of two strands of special steel chain, operating over sprocket wheels at top and bottom. These chains are provided with studs or pivots. These pivots carry special trays constructed of hangers, crossbars and fingers, the platform or tray proper being made with a series of crossbars or fingers, the purpose of which is explained further along. These trays swing perfectly free on the pivots, but are provided with rollers at each end, these rollers traveling in vertical guides to keep the tray steady and prevent the load from falling off.

Should the load not be discharged at any of the points this will do no harm, because the trays will simply pass over the head wheels and come down on the other side and up again the same as before, and will continue to do this indefinitely until



JEFFREY FINGER-TRAY ELEVATOR.

the load is removed. To discharge the load special incline unloading fingers are provided. These fingers are so located as to register exactly with the fingers in the tray. The latter, passing down between the discharge fingers, leaves the load on the latter, and the load, owing to the angle of the fingers, slides off onto a steel apron conveyor, which carries it some distance away and deposits the same onto the floor. This apron conveyor, however, is not required in all cases.

The operation in loading the trays is somewhat similar, except that the loading fingers are straight and the load is removed from them by the trays passing up between on the ascending side, the unloading being done on the descending side. Both the loading and unloading fingers

are pivoted, and can be folded back out of the way, allowing the load to pass up and down when desired without being discharged.

This elevator has trays 26x36 inches, and will carry weights up to 250 pounds if desired.

This type of elevator can be made to handle packages just as fast as they can be put on up to 500 or 600 per hour.

The Jeffrey Manufacturing Co. builds several varieties of this class of machinery for handling barrels, boxes, bags and general freight. It has constructed elevators for handling hogsheds weighing as much as 3000 pounds.

### The Goulds Mine Pump.

It may safely be said that in no field of industry has electricity played a greater part in improving conditions of labor and at the same time reducing the operating expenses as it has in the vast mining plants all over the world. The use of electricity in mining operations is constantly increasing, for lighting, operating fans, drills, locomotives, pumps, etc., as it is less expensive to wire for the motors than it is to pipe for steam, and in many instances operations can be carried on with ease at points where it would be impractical to operate steam-driven machines.

The Goulds Manufacturing Co. has for several years given special attention to electric pumps for mines. Hundreds of its efficient pumps are in use all over the world giving the best of satisfaction, and the renewal of orders from old customers is an evidence of the high esteem in which they are held by those that use them. It is claimed that Goulds Triplex Power Pumps will pump more water for the amount of power expended than pumps of other types, and that one of these efficient pumps driven by an electric motor will cost for power only from one and one-eighth to three cents per horse-power hour, or only about what the coal alone at \$3 per ton would cost to run a steam pump.

In addition to this, the electric pump can be arranged to start and stop automatically, as the demands of the service may require, or the pumps in various parts of the mines can be controlled from some central station if desired.

The Goulds Double-Acting Triplex Plunger Mine Pump, which is illustrated herewith, was especially designed for mine service. It is a "low-down" pump, requiring but a small amount of head room, and can be taken to pieces and lowered

steel, both machine-cut from the solid.

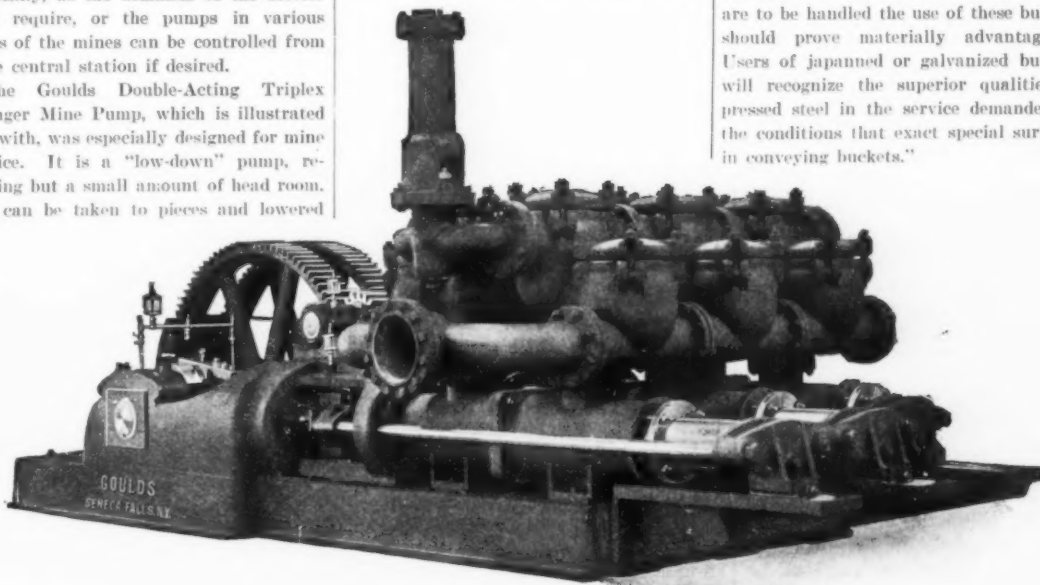
The crankshaft is forged steel in two pieces and single throw, with gears on the inner side. The crankshaft bearing surfaces have wedge and screw adjustment of special construction to keep the shafts in perfect alignment. The six cylinders are charcoal iron, with heavy cast bronze linings. The valves are extra heavy bronze, with leather or rubber faces, as may be desired, and where exceptionally gritty or acidulous water is to be handled especially constructed valves can be furnished.

The pump illustrated is 7½x16 inches, having a capacity of 660 gallons per minute against a pressure of 300 pounds or an elevation of 700 feet, and is furnished with a spring alleviator in place of an air chamber.

Seven of these pumps 5½x16 inches have recently been installed in the De Beers diamond mines, South Africa. Their combined capacity is 3,600,000 gallons every 24 hours. They are located 1300 feet below the surface, and all connected to a common discharge. Each pump is direct connected to a Westinghouse electric motor.

The Goulds Manufacturing Co. also makes a portable electric triplex mine pump in several different sizes, each mounted on a heavy iron truck suitable for any gauge of track. The iron track is not affected by moisture, and keeps the pump and motor in perfect alignment. Cylinders and glands have heavy cast bronze linings. All working parts are easy of access and thoroughly protected by guards to prevent injury from grit or falling rocks, as well as injury to life and limb. It is a very compact, powerful and durable outfit, and many of them are in use in the coal regions, and this company says it installed the first pump of this type ever built in this country in "The William A" colliery at Scranton, Pa., over 15 years ago.

An electric mine sinking pump is another of the Goulds specialties. It is driven by a moisture-proof motor of standard make; has four outside-packed



GOULDS DOUBLE-ACTING TRIPLEX PLUNGER MINE PUMP.

through an ordinary mine shaft. The pump is built in a number of sizes for elevations from 350 to 3500 feet. The valves are all on top, where they can be easily reached for examination and repairs by simply loosening the nuts that secure the valve-box covers and dropping down the swing bolts. The plungers are outside packed and the crossheads are fitted with adjustable babbitted shoes which run in bored guides. The double gears are of close-grained cast iron and the pinions of

plungers and all parts carefully protected from injury or abrasion by heavy castings, so that the pump will stand any amount of hard usage.

The Goulds Manufacturing Co. has met with well-deserved success because of the superiority of its pumps in design and workmanship.

The main office and extensive works of the Goulds Manufacturing Co. are at Seneca Falls, N. Y., and branch offices are maintained in New York, Chicago,

Boston, Pittsburg, Denver and Los Angeles.

### Pressed Steel Elevator Buckets.

The Link-Belt Engineering Co. of Philadelphia is using pressed steel in the manufacture of elevator buckets. It says "the new buckets, made in one piece free from seams and rough surfaces, are from 20 to 40 per cent. lighter than malleable-iron buckets of corresponding sizes. The accompanying illustration shows the uniformity



2954

PRESSED-STEEL ELEVATOR BUCKETS.

of gauge and the symmetrical design. The superiority of the new pressed-steel buckets over cast buckets is obvious; compact and light, they obviate the destructive wear on chain and sprocket wheels and prolong the life of the elevator, a factor of importance to the users of this class of machinery. Where cement, sand, grain, coal, gravel and materials of a like nature are to be handled the use of these buckets should prove materially advantageous. Users of japanned or galvanized buckets will recognize the superior qualities of pressed steel in the service demanded by the conditions that exact special surfaces in conveying buckets."

The baccalaureate address delivered at the commencement last spring of Mercer University of Macon, Ga., by Judge Emory Speer on Joseph E. Brown of Georgia has been published in attractive pamphlet form with portraits as an interesting and valuable contribution to Georgia biography.

Mr. W. L. Burks of Nashville, Tenn., has been elected secretary of the newly-organized Chamber of Commerce of Clarksville, Tenn.

## MINING.

### Oklahoma Oil Fields.

A number of capitalists who have had experience in the development of oil properties in Kansas, Oklahoma and West Virginia are planning extensive developments in the territory around Frederick, O. T. One of the promoters of the enterprise is credited with saying:

"We feel so certain of getting oil in paying quantities that we have concluded to spend several thousand dollars drilling in the effort. This field has been proven by the United States geologist. It is almost exactly in the center of his survey, and as shown on the official map we are between two producing wells 20 and 50 miles on either side. We are a short distance from the foot of the Wichita mountains. The country presents to the eye of an oil expert an extremely favorable appearance, gas mounds and eruptions of the earth being present and frequent. We intend to pipe oil or gas (whichever may be the result of our find) right into Fort Worth and Dallas in less than one year; so you see we will benefit those cities as well as Frederick. There will be no let-up on the work until it is accomplished, which will begin in 60 or 90 days.

"We are now making our arrangements to build derricks and get in readiness for drilling. We hold leases on a large quantity of land tributary to Frederick and own in fee-simple 640 residence and business lots in the town proper, which are high and level, and overlook the little city and surrounding country."

Messrs. E. A. Bourne of Waurika, O. T.; Joseph H. Price and Charles T. Bradford of Fort Worth, Texas, are named as incorporators of the company which will be organized. It will be known as the Oklahoma Oil, Gas, Mineral & Townsite Development Co., and articles of incorporation have been filed, the capital stock being \$500,000, with privilege of increasing to \$500,000.

### North Carolina Tale.

Mining Engineer Archibald M. Graham of Glendon, N. C., has made an examination of the 750-acre tract of tale property owned by D. A. McDonald of Carthage, N. C. Mr. Graham states in part that "the property lies directly in the strike of the main zone of pyrophyllite traversing the northern portion of Moore county. The vein shows by its walls for a distance of about two miles, and there should be not less than 250 feet wide of good pyrophyllite tale. The length of the pay streaks can only be determined by a vast amount of work, owing to the huge extent of the ore body. The development consists of a ditch four feet wide, a surface cross-cut at right angles to strike of vein. The ditch shows good pyrophyllite for 100 feet, with no indication of playing out at either end. A pit 10 feet deep shows the quality and color improve with depth. Another ditch, running almost with strike of vein, shows up fully 250 feet of the ore body in length, with the same probabilities ahead and behind. A few gravel-like pits sunk at intervals for a mile or so will surely show up a huge tonnage on the surface. I advise the sinking of a small shaft 25 or 30 feet near the ditch. If the body shows up well at that depth you can count upon hundreds of thousands of tons which can be mined at nominal cost. Your water-power will probably develop 800 horse-power. With little expense the roads can be put in shape to admit of hauling by traction engines, thus minimizing an important item of expense. The cost of a mill and the mechanical outfit will not be over \$10,000 for 20 tons of finished product per 10 hours."

## Sale of Coal Lands.

Mr. A. S. Guthrie, administrator of the J. L. Beury estate in West Virginia, through the real-estate firm of Watts, Gaines, Davis & Mathews of Charleston, W. Va., has sold to D. C. T. Davis, Jr., of Charleston, trustee, presumably for Richmond interests identified with the Chesapeake & Ohio Railroad, 32,000 acres of undeveloped land fronting on Meadow river for a consideration of \$850,000. The property is located in Fayette and Greenbrier counties, and adjoins the tract of 25,000 acres recently sold from the Beury estate to the Berwind-White interests. It is heavily timbered, and contains the New River coal vein, plans for the development of which are already in course of preparation. The purchasing parties are said to be closely identified also with the Meadow River Railroad project, and are expected to push this enterprise in order to facilitate the development of the tract.

### Lead and Zinc Ore.

The Southern Lead Co., of which Messrs. N. I. Mayes, B. M. Tarver, J. H. Arty, J. R. Morgan and C. L. Covington are named as incorporators, has applied at Chattanooga, Tenn., for a charter incorporating the company with a capital stock of \$55,000. It is stated that St. Louis capitalists, who are interested in lead and zinc properties in Missouri, are supporting the Southern Lead Co., whose purpose it is to develop lead ore in Bradley county, Tennessee, the deposits being located about three miles from Cleveland. The mines have been in operation on a small scale for some time, but the conditions are so encouraging that it was determined to carry on the operations more extensively. The company contemplates erecting a large smelter in Chattanooga. W. D. Ham, in charge of the office at Chattanooga, is also foreman of the mines.

### Coal Industry Active.

With the advent of new railroads and extensions and the investment of capital along other lines in the Southeastern Kentucky coal division the mining industry of this section is very active and rapidly expanding. The five counties comprising this field—Bell, Whitley, Knox, Laurel and Pulaski—produced an aggregate last year of 2,324,642 tons. There are now several thousand miners engaged in opening up new mines which are touched by the railroad extensions, and so pronounced is the general activity that it is anticipated the coal output of this section for this year will be greatly in excess of that of last. Some of the counties mentioned will probably double their production.

It is announced that a general meeting of the bituminous coal operators of the country will be held in Chicago, Ill., November 22.

### Blytheville Business Men.

[Special Cor. Manufacturers' Record.]  
Blytheville, Ark., September 2.

The business men of our city have just organized a Business Men's Club for the advancement of Blytheville. This city is in the heart of the great St. Francis valley, on the main line of the St. Louis & New Orleans branch of the Frisco system. It is reached by a branch of the Cotton Belt from Paragould, and the Jonesboro, Lake City & Eastern, 55 miles in length, connects us with Jonesboro. We are surrounded by a large hardwood forest, and are very desirous of getting in touch with manufacturers who need this kind of material. This would become a valuable location for manufacturers interested in developing such raw material as is mentioned.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### Creosoting Timber.

Mr. E. O. Faulkner, superintendent of the tie and timber department of the Santa Fe Railroad system, speaking of the unloading of a shipment of 1,500,000 gallons of creosote for Santa Fe system and the treatment of timber generally, is quoted by the Galveston News as follows: "This shipment, which will arrive along about the 3d of September, is by far the largest shipment of creosote that has ever been made. I am here to see about emptying the tanks in Galveston, so that there may be no delay in unloading the vessel when it comes; also to be here when the vessel comes in. All of the stuff will be shipped to the Santa Fe's timber-treating plant at Somerville; that is, the 1,500,000 gallons of the creosote which is being brought over for that road. There is not a great deal of the product in the Santa Fe tanks here now, but what is here will be shipped to Somerville before the arrival of the ship, so that all the tankage capacity will be available for the incoming creosote.

"The Santa Fe has ceased the use of the tannin and zinc treatment at Somerville, where its timber-treating plant is located, and now uses nothing but creosote, which is the best wood-preserving material on earth. It has been in use over 50 years, and its worth has been proven. I believe it will not be long before nothing but creosote will be used for preserving timber.

"Some idea of the magnitude of the present shipment can be obtained when it is stated that in the United States last year there were produced but 13,000,000 gallons of creosote. The Somerville plant consumes a little over 400,000 gallons of the stuff per month, or something like 5,000,000 gallons per year.

"You can gain some idea of the increase in the treatment of railroad ties by a study of these statistics: In 1885 there were treated in the United States only 211,000 ties. In 1894, practically 10 years later, there was an increase to 950,000. In 1904 the figure was 13,711,000. From this you can judge for yourself whether or not treated timbers are a success. The necessity for making timber of all sorts last as long as possible has begun to be realized. The forests are not as large as they once were, and at the rate they are being cut down at the present day, he who is thoughtful of tomorrow must figure on an economy somewhere."

### Purchase of Lands.

Messrs. W. C. Vereen and W. H. Smith of Moultrie, Ga., have purchased from Iowa interests, Arthur Hoffman of Muscatine, Iowa, making the deeds, 25,000 acres of timber land in Jefferson and Leon counties, Florida. The quality of the timber on the tract, which for the most part is yellow pine, is considered very fine, and Mr. Smith will begin at once the installation of stills for the purpose of working up the turpentine. The consideration for this property, which is the last of several recently acquired by Mr. Vereen and associates, was about \$175,000. It is stated that the prospects for the construction of a railroad to facilitate its development are encouraging.

### Nearly 21,000,000 Feet.

As compared with the month of July, the lumber shipments from the port of Jacksonville, Fla., for August, according to the records of the custom-house, show an increase of 5,000,000 feet. During the month shipments of yellow pine for the coastwise trade aggregated 16,166,602

feet; cypress, 1,710,000 feet; crossties, 52,200, equivalent to 2,088,000 feet; yellow pine for the foreign trade, 782,496 feet—making a total of 20,747,098 feet, sent out in 113 vessels. In addition there were shipped also 14,175,000 shingles in bulk and 5400 bundles, besides 30,240 barrels of naval stores.

### Chestnut-Oak Bark Wanted.

A \$225,000 tannery to be established by West Virginia capitalists will want prices on chestnut-oak bark delivered at Norfolk, Va. Correspondence regarding this should be addressed to Messrs. Page & Taylor of Norfolk, who represent the capitalists interested.

### Purchasing Timber Tracts.

A dispatch from Beaumont, Texas, states that W. G. Powell of Leesville, La., has completed a tour of Jasper and Newton counties, Texas, where he purchased large tracts of timber lands for interests which he represents, paying in the aggregate \$450,000.

### Lumber Notes.

The building commissioner's office of St. Louis, Mo., reports that for the month of August 827 building permits, representing a valuation of \$1,855,980, were issued in that city.

The records of the Mechanics, Dealers and Lumbermen's Exchange of New Orleans, La., show that from January 1, 1905, 3500 building plans for new work have been posted and 700 contracts awarded in that city. Scarcity of labor and building material is said to have been the cause of the remaining contracts being withheld.

Statistics show that during July there was a decrease of 26,000,000 feet of lumber in stocks and an involuntary curtailment of \$6,000,000 feet among 149 mills in the Southwestern territory, with a demand so brisk that most of the mills are working overtime. The Southern Lumber Manufacturers' Association has announced a general advance of \$1 per thousand feet on pine.

Mr. H. C. Severs of the board of tax listers and assessors of Charlotte, N. C., has compiled statistics which show that 148 buildings of various kinds were completed in Charlotte during the year ended June 1, representing a valuation of more than \$500,000. At the present time there are 317 buildings in course of construction, whose value is estimated at nearly \$1,500,000.

### Large Iron Industry Planned.

A correspondent of the MANUFACTURERS' RECORD states there is some foundation for the rumors that the Grand Rivers (Ky.) furnaces will be put in operation in the near future, and that plans are being made for a thorough development of the iron-manufacturing resources of that section of Kentucky in which Grand Rivers is located. It is known that Pittsburg capitalists are interested in a plan to blow in the Grand Rivers plants, the latter being now the property of the Hillman Land & Iron Co., John W. Harrison of St. Louis, Mo., president. In connection with this it is reported to be contemplated to combine with the Paducah furnace at Paducah, Ky., owned by J. W. Harrison and associates of St. Louis, and establish an extensive iron-manufacturing industry. There are two stacks at Grand Rivers, the capacity being 45,000 tons annually of foundry and forge pig-iron. The Paducah stack has an annual capacity of 30,000 tons.

The next meeting of the Fertilizer Manufacturers' Association will be held at Asheville, N. C., October 10.



# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from 'THE MANUFACTURERS' RECORD.'

### ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and more attention than a more circular one.

## BALTIMORE BUILDING NOTES.

### Business Buildings.

**Baltimore—Apartment-house.**—It is reported that Ernest B. Horn of Mount Airy, Md., has sold to A. Scherr the properties at 267 West Saratoga street and 227 and 229 North Pine street, upon the site of which an eight-story apartment-house will be erected.

**Baltimore—Dwelling.**—Walter D. Focke, International Trust Co., 25 East Baltimore street, recently reported as intending to erect dwelling at Roland Park, has commissioned Henry Brauna, architect, 113 West Saratoga street, to prepare plans and specifications; structure will be 37x57 feet.

**Baltimore—Stable.**—Herbert R. Linthicum, 26 West Conway street, recently reported as having purchased the property at 214 West Conway street and awarding contract to J. Henry Miller, 110 Dover street, for the erection of four-story building on the site, has also purchased 212 West Conway street, and will use the site in connection with the building of proposed structure; building to be of brick with granite base, four stories high. J. Henry Miller will erect it.

**Baltimore—Warehouse.**—Charles W. Simpson, 415 East Lexington street, has been awarded contract for the erection of new front and addition to 305 North Greene street for Dr. W. F. M. Kemp, 305 North Greene street, after plans and specifications by Charles Anderson, architect, 324 North Charles street.

**Baltimore—Warehouse.**—Henry S. Rippel, 7 Clay street; Eugene D. Springer, 424 South Charles street, and the Russell Construction Co., Room 12, 17 East Saratoga street, are preparing revised estimates on the construction of warehouse at 17 South Charles street for C. W. Abbott & Co., 206 South Charles street, full details of which appeared last week. Bids to be in on September 4.

**Baltimore—Dwellings.**—The Russell Construction Co., Room 12, 17 East Saratoga street, has been awarded contract for the erection of 12 two-story dwellings 14x43 feet

each, located at Madison and Liberty streets, for S. C. Snellgrove and Wallace Montgomery.

**Baltimore—Store Building.**—Referring to the proposed store buildings to be erected at 531, 533 and 535 North Howard street for Hamilton G. Fant, treasurer of the C. D. Kenny Company, Eutaw near Barre street, it has been decided to erect a one-story building at present, instead of three-story building, as originally intended; structure to have second-story joists and temporary roof, so that additional story can be added later. William Ferguson & Bro., 214 Clay street; J. J. Walsh & Son, 1525 Maryland avenue; Edward Brady, 1113 Cathedral street; John Stack & Son, 253 West Preston street; John Cowan, 106 West Madison street; T. B. Stanfield & Son, 109 Clay street; C. C. Watts, 113 Hamilton street; McIver & Piel, Builders' Exchange Building, 2 East Lexington street; Thomas L. Jones & Son, 410 West Saratoga street, and John Hiltz & Son, 3 Clay street, are estimating; damp-proofing, metal sash and frames, copper flashing, concrete caisson, heating system, plumbing, electric wiring and lighting fixtures and removing present structures not in general contract; Tormey & Leach, architects, 323 North Charles street.

**Baltimore—Dwelling.**—Thomas B. Stanfield & Son, 109 Clay street, and L. Fowble of Cockeysville, Md., are among the builders estimating on the construction of dwelling on the Harford road for Clifford Dietrich after plans by William S. Snabel, architect. Building will be about 56x30 feet.

**Baltimore—Store Building.**—Theodore H. Diener & Co., 114 East Lexington street, has leased lot at 217 East Baltimore street and will erect two-story and basement building 18x103 feet. Structure will have front of Pompeian brick with brownstone trimmings; first story to be of plate glass and oak. George Bunnecke & Sons, 305 St. Paul street; Charles L. Stockhausen, National Marine Bank Building, Gay and Water streets; Joseph Schamberger, 2215 East Baltimore street, and Lorenz Schoenlein, 2217 East Baltimore street, will be asked to estimate; bids to be in September 5; Otto Kublitz, architect, 1904 North Washington street.

**Baltimore—Dwelling-houses.**—Isaac Ellinger, 1720 North Charles street, and E. J. Ellinger, 209 St. Paul street, have purchased several lots in Northeast Baltimore, and, it is reported, will erect a number of dwellings.

**Baltimore—Restaurant Building.**—William H. Schultz has awarded contract to the John A. Sheridan Company, 321 North Holliday street, for converting warehouse at 16 McClellan's alley into restaurant building; first floor to contain restaurant and cafe, and second floor to be laid out for billiard-room; improvements to cost about \$5000.

**Baltimore—Arcade Building.**—Ex-Gov. Frank Brown, 820 North Charles street, has purchased from the Safe Deposit & Trust Co., 13 South street, trustee of the Charles Ridgely White estate, the property at 322 North Charles street. The lot, which measures 24.6x78 feet, is improved by a three-story building, which will be temporarily connected with the arcade which runs from Charles street near Pleasant to Saratoga street, opposite Hotel Rennett. It is the intention of the purchaser to eventually raze the present building and erect a two-story building on the site, making it the entrance to the arcade.

**Baltimore—Library Building.**—Edw. Brady & Son, 1113 Cathedral street, has been awarded contract for the erection of addition to the Enoch Pratt Free Library Building, Mulberry street near Cathedral. J. Evans Sperry, 409 Calvert Building, is the architect.

**Baltimore—Dwellings.**—Oldenburg & Kelley, 300 Eastern avenue, Highlandtown, have purchased lot on Patterson Park avenue near Chase street, and will probably erect 44 dwellings on the site, using material from the old building of the Baltimore & Ohio Railroad Co., Baltimore and Calvert streets, which is now being razed. The property fronts 295 feet on Patterson Park avenue and extends back to Collington avenue, where it has a similar frontage. The purchasers contemplate selling a portion of the lot for the location of a manufacturing plant, and if this is done only about 24 dwellings will be erected.

**Baltimore—Office Building.**—It is stated that Grosvenor Atterbury, architect, of New York city has prepared plans for the addition of two stories on building at 305 North Charles street for the Wilson estate.

**Baltimore—Apartment-house.**—It is stated that Edward H. Glidden, architect, 14 Wilson Building, Charles and Saratoga streets, has been commissioned to prepare plans and specifications for an apartment-house to be erected at Eutaw Place and Wilson street.

**Baltimore—Church.**—Plans for the proposed church structure for the congregation of the Presbyterian church at Walbrook, which were prepared several months ago by Mottu & White, architects, 328 North Charles street, and upon which estimates were received, will probably be revised and new bids asked for.

**Baltimore—Dwelling.**—Henry Pierson, contractor, 1009 Hanover street, has been awarded contract for the erection of two-story dwelling to be erected at 118 Warren avenue for Miss Julia Justis; cost about \$3000.

**Baltimore—Store Building.**—W. T. Murphy, contractor, 908 North Howard street, has been awarded contract for the alterations to be made at 19 West Saratoga street for E. G. Perine.

**Baltimore—Store Building.**—Bruton & Co., 1300 North Charles street, are considering estimates for the reconstruction of building at Charles and Preston streets into store building.

**Baltimore—Dwellings.**—J. Clinton Watts, 2 East Saratoga street, has purchased for John F. Carter, North avenue and 7th street, the property at northwest corner of Arlington avenue and Mulberry street, which the purchaser will improve with 12 two-story dwellings. The lot has a frontage of 147.3 feet on Arlington avenue and a depth of 91 feet.

**Baltimore—Warehouse.**—Louis Levl, architect, 704 Union Trust Building, Charles and Fayette streets, will prepare plans for proposed five-story warehouse to be erected at 109 and 111 West German street for Messrs. Isaac & Samuel S. Weinberg, 4-6 South Eutaw street. Plans will probably be distributed next week for estimates.

**Baltimore—Warehouse.**—Alexander Yearley & Son, Lexington and Charles streets, representing the owner, have commissioned J. Appleton Wilson, architect, 303 Courtland street, to prepare plans and specifications for the erection of four-story warehouse at 109 and 111 South Calvert street; structure to be on site 33.6x60 feet, of brick, with modern conveniences; plans to be distributed for estimates in about two weeks.

**Baltimore—Store.**—William L. Luther has had preliminary plans prepared for three-story building to be erected at 26 Market Space. Site is 18x40 feet.

**Baltimore—Warehouse.**—The Colonial Trust Co., 13½ West Saratoga street, has awarded contract to James F. Farley, contractor, 17 North Frederick street, for the erection of its proposed warehouse at southwest corner of Water and Frederick streets; structure to be four stories, 32x67 feet; brick with granite base and terra-cotta trimmings; steel beams; cast-iron columns; slag roof; galvanized-iron cornice and skylights; vault lights; electric wiring and fixtures; sanitary plumbing, heating system and elevators not in contract; Ellicott & Emmart, architects, Union Trust Building, Charles and Fayette streets.

**Baltimore—Club Building.**—The Clover Club, 1914 Madison avenue, has purchased the property at 1916 Madison avenue and will combine the structure with its present building, bids for the construction work to be asked for as soon as plans are prepared and other details arranged. It is reported that J. E. Laferty, architect, Builders' Exchange Building, 2 East Lexington street, will prepare plans for the structure.

### Manufacturing Buildings and Other Enterprises.

**Baltimore—Carriage and Toy Factory.**—As the estimates for the erection of factory at southeast corner of Fremont and Lombard streets for the Carriage & Toy Co., Calvert and Saratoga streets, reported August 10, were too high, revised bids will be asked for; J. E. Laferty, architect, Builders' Exchange Building, 2 East Lexington street.

**Baltimore—Motor Car Company.**—Arthur Stanley Zell, 210 Ridgewood road, Roland Park; Martin Gillet Gill, 200 Ridgewood road, Roland Park; Oliver Carroll Zell, 1022 North Calvert street, and Randolph Barton, Jr., 207 North Calvert street, have incorporated the Motor Car Co., with a capital stock of \$15,000, for the purpose of dealing in automobiles.

**Baltimore—Button Factory.**—The Alma

Manufacturing Co., 611 to 627 South Monroe street, has awarded contract to the Woodruff-McLaughlin Company, 100 East Lexington street, for the erection of its proposed two-story building 64x203 feet, with a wing 35x82 feet. Structure will be of brick with granite base and provided with fireproofs. Edward Storck, architect, Winston avenue near York road, prepared plans and specifications.

**Baltimore—Oyster Dealers.**—The Orem Oyster Co. has been incorporated with a capital stock of \$3000 for the purpose of conducting wholesale and retail oyster business; incorporators, Oscar C. Orem, 824 West North avenue; O. Parker Baker, 232 St. Paul street; Helen Orem, 3310 Auchentoroly Terrace, and others.

**Baltimore—Railroad Improvements.**—Edward Brady & Son, 1113 Cathedral street, and the McLean Contracting Co., 902 Maryland Trust Building, Calvert and German streets, are additional bidders who are estimating on the improvements to be made at Riverside for the Baltimore & Ohio Railroad Co., J. E. Greiner, engineer, full details of which appeared last week. Other contractors who are estimating are J. Henry Miller, 110 Dover street; Charles Gilpin, 601 Union Trust Building, Charles and Fayette streets, and Henry Smith & Sons Company, 116 Regester street, and Henry S. Rippel, 7 Clay street. Bids will be received by the engineer until September 8.

**Baltimore—Railroad Improvements.**—Edward Brady & Son, 1113 Cathedral street, has been awarded contract for the construction of coal tipples and ash pits at Riverside for the Baltimore & Ohio Railroad Co., J. E. Greiner, engineer. Tipples will be about 900 feet long, to be constructed of Georgia timber; ash pits to be about 400 feet long of reinforced concrete and steel. The same contractors have also been awarded contract for the erection of grain dryer to be erected at Locust Point; structure to be fireproof, of brick, steel and terra-cotta; cost between \$30,000 and \$40,000.

**Baltimore—Bedding Factory.**—The George L. Seldner Company has been incorporated with a capital stock of \$7000 for the purpose of manufacturing bedding; incorporators, Ralph C. Heller, 2107 Eastern avenue; Herman Garmatz, 1043 North Chapel street; Jacob Siegrist, 1826 Bank street, and others.

**Baltimore—Oyster Dealers.**—The Schall-Smith Company has been incorporated, with a capital stock of \$1000, for the purpose of dealing in oysters; incorporators, John W. Schall, Atlantic Wharf; Edwin A. Smith, Charles E. Hill and William H. Dawson.

**Baltimore—Car Barn.**—Simonson & Pietsch, architects, American Building, Baltimore and South streets, have distributed plans and specifications for alterations to be made to the Madison avenue car barn for the United Railways & Electric Co., Continental Trust Building, Baltimore and Calvert streets; improvements to consist of interior changes to facilitate the handling of cars. John Waters, 23 East Centre street; John Cowan, 106 West Madison street; J. Henry Miller, 110 Dover street; Edward D. Preston, 140 West Fayette street, and John Hiltz & Son, 3 Clay street, are estimating on the work; bids to be in at noon September 12.

**Baltimore—Vinegar Factory.**—It is reported that Lewis Elmer & Sons, 417 East Lombard street, have purchased site on Central avenue and will erect vinegar and cider factory.

**Baltimore—Button Factory.**—The Alma Manufacturing Co., 611 to 627 South Monroe street, has increased its capital stock to \$500,000.

**Baltimore—Carriage and Toy Factory.**—J. E. Laferty, architect, Builders' Exchange Building, 2 East Lexington street, has distributed revised plans for the erection of proposed carriage and toy factory to be erected at Fremont and Lombard streets for the Carriage & Toy Co., Calvert and Saratoga streets.

### Subbids Wanted.

Mention of contractors wanting subbids on construction work and material will be found, when published, in the "Machinery Wanted" column on another page under the heading of "Building Equipment and Supplies."

### ALABAMA.

**Anniston—Glass Factory.**—It is reported that a glass factory will be established. Dr. Winkle, president Young Men's Business League, can give information.

**Anniston—Sewerage System.**—City Engineer Hunter has completed profiles, specifications, etc., and work will begin at once on the construction of sewers in West Anniston at a cost of about \$3000. L. P. Cooper will supervise the construction.

**Attalla—Iron Furnace.**—The Eagle Iron Co., it is reported, will shortly put its furnace in blast; annual capacity 18,000 tons of car-wheel pig-iron; main office, Chattanooga, Tenn.

**Birmingham—Coal-mining.**—The Cannel Coal Co. has been incorporated with \$10,000 capital stock to mine coal. E. F. Ensen is president; W. C. Sterritt, vice-president and treasurer, and Forney W. Brandon, secretary.

**Ensley—Iron Furnace.**—It is stated that the Tennessee Coal, Iron & Railroad Co. will arrange at once for the construction of its proposed new iron furnace referred to several weeks ago. Later reports say that the furnace will be built on the site of furnace No. 5, now being dismantled for the purpose, and that upward of \$750,000 will be expended for the plant. It is understood that a capacity of 400 tons daily is contemplated to duplicate the output of the No. 6 furnace recently blown in; general offices at Birmingham, Ala.; New York office at 100 Broadway.

**Gadsden—Distillery.**—It is reported that the Gadsden Distilling Co. will double the capacity of plant.

**Scottsboro—Saw-mill.**—J. W. Jones of Fackler, Ala., reported last month as having secured the timber rights on 1000 acres of land, will arrange at once for the installation of saw-mill to develop the tract. Machinery has all been purchased.

#### ARKANSAS.

**Bergman—Orchard Company.**—The Oregon Orchard Co. has incorporated with \$150,000 capital stock to engage in fruit-raising. C. S. Hutchinson is president; J. A. Lewis, vice-president; Frank Waring, secretary, and Charles M. Greene, treasurer.

**Biggers—Cotton Gin.**—The Biggers Gin Co. has been incorporated with \$5000 capital stock by A. Z. Sehnalium, W. S. Roberts and E. L. Farleys to operate a cotton gin.

**Black Rock—Cotton Gin.**—The Black Rock Gin Co. has been incorporated with \$10,000 capital stock to operate a cotton gin. J. T. Brady is president; C. H. Stout, vice-president, and G. A. Henry, secretary-treasurer.

**Camden—Saw-mill.**—Camden Hardwood Lumber Co., reported incorporated last week to operate saw-mill, will erect building, 60x180 feet, to be equipped for manufacturing hardwood lumber and wagon material; capital stock \$10,000. E. C. Holmes is president; J. J. Prince, vice-president.

**Fort Smith—Gas and Oil Wells.**—The Fort Smith Gas & Oil Co. has incorporated with \$10,000 capital stock to drill for gas and oil. W. R. Abbott is president.

**Little Rock—Flour Mill and Grain Elevator.**—The Brooks-Rauch Mill & Elevator Co. has been incorporated with \$30,000 capital stock by R. T. Brooks, M. Brooks and Alex. J. Rauch to operate flour mill, grain elevator, etc.

**Little Rock—Gas Plant.**—John B. Jones and associates have secured franchise for the construction of gas plant.

**Little Rock—Gas-machine Works.**—W. B. Chastain, H. E. L. McCollum, C. J. Saenger, John Hencke, C. E. Carroll, James Farmer, William Mosby, E. P. Tetwiler, H. A. Redley and associates have incorporated the Domestic Machine Co. with \$10,000 capital stock to manufacture gas machines, etc.

**Little Rock—Cigar Company.**—The Morton Cigar Co. has been incorporated with \$25,000 capital stock by J. T. Morton, W. H. Mallory and T. A. Robinson.

**Little Rock—Plumbing Company.**—The John Gowdy Company has amended charter changing its name to the John Gowdy Manufacturing Co. and increasing its capital stock from \$6000 to \$25,000.

**Mammoth Spring—Cotton Gin, Water-works, etc.**—J. E. Ford, G. T. Wood, H. M. Erwin, Elmer Cooper and H. M. Simmons have incorporated the Mammoth Spring Gin & Power Co. with \$5000 capital stock to operate cotton gin, install water-works system, etc.

**Marianna—Sewerage System.**—City will issue bonds for the construction of sewerage system. Address The Mayor.

**Pinnacle—Lumber Company.**—The Lacy-Goris Lumber Co. has been incorporated with \$25,000 capital stock by Ed Lacy, N. P. Goris, E. J. Brady, A. F. Brady, W. P. Brown and others.

**Rison—Lumber Company.**—Incorporated: The Culpepper Lumber Co., with \$5000 capital stock, by J. P. Culpepper, J. G. Culpepper and W. S. Ames.

#### FLORIDA.

**Bowling Green—Shingle Mill.**—A. H. Buck & Co. will erect shingle mill 40 feet square and equip for a daily capacity of 20,000 to 30,000 cypress shingles. About \$900 will be invested. This item was referred to last week.

**Daytona—Water-works.**—Cromwell Gibbons of Jacksonville, Fla.; J. Hall Brunsby of Deland, Fla., and others have applied for franchise to construct and operate water-works.

**Gainesville—Fertilizer Factory.**—It is reported that the Virginia-Carolina Chemical Co., Richmond, Va., has purchased the plant of the Florida Fertilizer Manufacturing Co. It is also stated that the factory will be considerably enlarged and new machinery installed.

**Jacksonville—Candy Factory.**—The C. B. Van Deman Company, it is reported, has purchased and will operate the candy factory of the Smith & Turner Company, expending about \$25,000 in the installation of new machinery, doubling the capacity. It is stated that the company will later secure larger quarters, when they will consolidate the two plants. The C. B. Van Deman Company manufactures cigars and tobacco.

**Jefferson County—Timber-land Development.**—It is reported that W. C. Vereen and W. H. Smith of Moultrie, Ga., have purchased 25,000 acres of land in Jefferson and Leon counties containing yellow-pine timber at about \$175,000. Arrangements will be made at once for the installation of turpentine stills, etc.

**Lake Helen—Turpentine Distillery.**—It is reported that Baldwin & Powell have purchased timber land near Rogers Station and will establish turpentine distillery.

**Miami—Ice and Cold-storage Plant.**—The Southern Ice & Fish Co., it is reported, will erect ice and cold-storage plant.

**Palatka—Crate and Box-hoop Machine.**—The Maull Manufacturing Co. has been organized with E. N. Maull, president and general manager; Charles Kupperburch, Sr., vice-president and treasurer, and C. A. Maull, secretary, to manufacture orange-box hoop machine, vegetable crates, etc.; capital stock \$10,000. E. N. Maull was previously reported as organizing company for this purpose.

**West Palm Beach—Real Estate.**—The Lincoln Land Co. has been organized with C. C. Chillingworth, president; F. O. Green, secretary, and R. J. Chillingworth, treasurer.

#### GEORGIA.

**Atlanta—Plow Works.**—The Atlanta Agricultural Works will rebuild plant reported burned last week at a loss of \$35,000. Two brick buildings, each 75x100 feet, will be erected and equipped with electric fixtures, electric elevators, etc. About \$15,000 will be expended. Equipment has been purchased.

**Bainbridge—Foundry and Machine Shop.**—G. O. Wheeler prepared the plans for buildings to be erected by the D. T. Sutherland Machine Works and Foundry, referred to last week; to include machine shop 52x104 feet, boiler and engine room 25x40 feet, pattern shop 25x40 feet. About \$10,000 will be invested. Foundry will be built later. Machinery has about all been purchased.

**Columbus—Furniture Factory.**—It is reported that J. L. McClellan will erect and operate furniture factory as soon as site can be secured.

**Grand Rivers—Iron Furnaces.**—A correspondent states that plans are contemplated for blowing in the two furnace stacks of the Hillman Land & Iron Co., of which John W. Harrison of St. Louis, Mo., is president, and that it is reported the Paducah furnace will be combined with the Grand Rivers properties in connection with plans for forming a new company; annual capacity of Grand River furnaces, 45,000 tons; of Paducah furnace, 30,000 tons.

**Hampton—Fertilizer Factory.**—The Hampton Fertilizer Co. has been organized with \$100,000 capital stock to erect and operate a fertilizer factory; W. M. Harris, president; R. J. Arnold, vice-president; J. L. Moore, secretary-treasurer, and H. G. Fields, general manager. It is proposed to install an acid chamber with a capacity of 15,000 to 18,000 tons. Work on the construction of buildings will begin at once.

**Jackson—Timber Lands.**—It is reported that W. T. Russell, C. Gray, O. Mitchell and M. Mason, representing a lumber syndicate of Parkersburg, W. Va., are investigating a tract of timber land near Jackson with a view to purchasing for development.

**Macon—Furniture Company.**—J. H. Becker, C. Keck and C. Kent have incorporated the Becker Furniture Co. with \$5000 capital stock and privilege of increasing to \$25,000.

**Montezuma—Knitting Mill.**—Montezuma Manufacturing Co. contemplates increasing output by 150 dozen suits daily.

**Rossville—Cotton-yarn Mill.**—Richmond Hosiery Mills has awarded contract for the erection of mill building two stories high, 100x200 feet, which will be equipped with 5000 spindles for manufacturing yarns. This company will consume the yarns in its knitting mill. A report on this addition was given in June. About \$100,000 will be expended.

**St. Mary's—Saw-mill.**—L. Johnson, reported last week as to build saw-mill for the development of 2000 acres of timber land recently purchased, will erect building 30x125 feet and equip for a daily capacity of 25,000 feet. About \$25,000 will be invested. Machinery has been purchased.

#### KENTUCKY.

**Ashtand—Coal Mines and Coke Ovens.**—It is stated that Eugene Zimmerman, president of the Cincinnati, Hamilton & Dayton Railroad Co., Cincinnati, Ohio, and a number of his associates in that corporation, have purchased for development some 350,000 acres of coal land in Kentucky. They intend to develop the properties to the utmost, and will at once begin the opening of coal mines and the construction of coke ovens. The plans are for an eventual output of from 2,500,000 to 3,000,000 tons of coal every year. A railroad will be constructed 125 miles south into the Kentucky coal fields in order to provide transportation facilities.

**Covington—Oil Wells.**—George Montgomery, M. M. Durrett and Anna M. Durrett have incorporated the Montgomery Oil Co. with \$10,000 capital stock.

**Louisville—Grain Elevator.**—The grain elevator which is being erected by Washburn-Crosby Company at a cost of \$25,000 will shortly be completed. It will consist of four brick storage tanks of 65,000 bushels each; main office, Minneapolis, Minn.

**Louisville—Ice Factory.**—The Merchants Refrigerating Co. is reported as to erect a 50-ton ice plant in South Louisville. As soon as site is secured a two-story brick building will be erected.

**Louisville—Street Paving.**—The Capital Paving & Construction Co. of Indianapolis, Ind., is the lowest bidder at \$1.44 a square yard for paving with vitrified brick Ormsby avenue, 6th and Stevin streets (previously reported), and will probably receive contract.

**Sturgis—Coal Mines.**—An option has been taken on the Bell coal lands, and it is proposed to organize a stock company, with C. H. Wilson, manager, to operate the mines.

#### LOUISIANA.

**Alexandria—Power-house.**—G. A. Motherhead has contract to erect proposed power-house for the Alexandria Street Railway; building to be 70x80 feet.

**Jennings—Oil-pipe Line.**—The Independent Pipe Line Co. has been incorporated to build a four-inch pipe line from the oil fields to refinery. J. B. Flynn is president; C. S. Morse, vice-president, and F. F. Morse, secretary-treasurer; capital stock \$10,000.

#### MARYLAND.

**Cumberland—Shoe Company.**—Incorporated: The Maryland Shoe Co., with \$40,000 capital stock, by John W. Young, John B. Shannon, Olin R. Price, Harry B. Colburn and David Price. Building has been secured.

**Midland—Sewerage System.**—Town is completing arrangements for the construction of proposed sewerage system, and contract for the piping has been let. Address Town Clerk.

**Oakland—Water-works.**—L. T. Yoder of Pittsburg, Pa., has secured franchise for the construction and operation of water-works. Mr. Yoder has been previously mentioned as applying for franchise to install water-works.

**Ocean City—Development Company.**—The Ocean City Development Co. has been incorporated under the laws of Delaware with a capital stock of \$300,000 for the purpose of buying and developing land, etc.; incorporators, W. D. Allen, 211 Liberty street, Baltimore, Md.; W. S. McKean, Milton Dashed, C. H. Thomas and R. L. Rainey, all of Baltimore.

**Stevenson—Power-house.**—John Waters, 23 East Centre street, Baltimore, Md., has contract to build power-house for H. Carroll Brown, previously reported; to be 30x60 feet, and cost \$6000.

**Upper Marlboro—Road Building.**—Thomas H. Lyons has been awarded contract for improving the Livingston road and the Baltimore and Washington turnpikes. About \$18,000 will be expended.

#### MISSISSIPPI.

**Hattiesburg—Mattress Factory.**—Hattiesburg Furniture & Manufacturing Co. will establish plant for the manufacture of mattresses; W. T. Temple, manager.

**Meridian—Steel Bridge.**—Reports state that the Mobile & Ohio Railroad Co. will build a steel bridge across Twenty-seventh avenue, R. V. Taylor, St. Louis, Mo., is general manager.

**Ocean Springs—Builders' Supplies.**—The Builders' Supply Co., previously reported incorporated with \$25,000 capital stock to deal in building supplies, has completed organization with Geo. W. Davis, president; J. J. Bland, vice-president, and E. S. Davis, secretary-treasurer.

#### MISSOURI.

**Aurora—Milling Company.**—Majestic Milling Co. has been incorporated with \$100,000 capital stock by M. T. Davis, J. R. Woodfell, Jr., Ed J. White and others.

**Kansas City—Gas Works.**—Chartered: The Olathe Gas Co., with \$300,000 capital stock, by A. F. Smith, L. F. Davidson, M. C. Beckwith, Katherine Zander and C. W. Prince, installed. Dispatches state that Forgo & Phillips are the Chicago people referred to.

**Louisiana—Shoe Factory.**—The Business Men's Association will erect three-story brick building of standard mill construction 45x120 feet, which will be equipped as shoe factory and operated by Chicago (Ill.) parties mentioned last week. A sprinkling system, heating plant, power plant, 30-horse-power boiler, 40-horse-power engine and elevator will be installed.

**St. Louis—Milling Company.**—Incorporated: Prudential Milling Co., with \$500 capital stock, by J. S. Bell, C. Cranston, C. F. Bert and others.

**St. Louis—Stove Foundry.**—Banner Stove & Manufacturing Co. has incorporated with \$10,000 capital stock to manufacture and deal in stoves, ranges, etc.; incorporators, James H. Howe, Arthur G. Hildreth and William H. Eckert.

#### NORTH CAROLINA.

**Asheville—Telephone System.**—W. A. Wynne of Raleigh, N. C., has secured franchise to install and operate an independent underground telephone system.

**Charlotte—Cotton Bleachery.**—The Southern Cotton Oil Co. is about to begin the construction of its bleachery department which will handle 8000 pounds of cotton-linting every day. The new plant will cost \$10,000. The company's addition to its old mattress factory has been completed, and this plant now has a daily capacity of 200 mattresses, an increase of 150.

**Charlotte—Stock-yard.**—It is reported that A. W. Whitaker will establish a stock-yard on East Stonewall street.

**Charlotte—Handkerchief Factory.**—The Charlotte Handkerchief Manufacturing Co. will double its output of 300 dozen daily. Contract for the new machinery has been given.

**Cherryville—Cotton Mill.**—N. B. Kendrick is mentioned in connection with plans for organizing a cotton-mill company in which Northern capitalists will be interested.

**Dunn—Knitting Mill.**—It is proposed to organize company to establish knitting mill, and T. C. Young is understood to be interested in the project.

**Greensboro—Shoe Factory.**—Chartered: The Ward Shoe Co., with an authorized capital stock of \$10,000, by C. R. Davis and M. J. Callahan of Augusta, Ga., to manufacture and deal in shoes.

**Henderson—Mercantile.**—Chartered: The Sturgis & Shell Company, with an authorized capital stock of \$10,000, by W. K. Sturgis and others.

**King's Mountain—Tin Mine and Mill.**—The Parker Tin Mining Co. is completing arrangements for the sinking of a shaft at its mine and the erection of mill; building to be 10x50 feet, equipped with the latest improved machinery.

**Maxton—The McKinnon Development Co.** has amended charter changing its name to the McKinnon Company and increasing capital stock from \$5000 to \$8000.

**Milledgeville—Cotton Mill.**—It is rumored that the Eldorado Cotton Mills will double capacity; present equipment 5000 spindles.

**New London—Cotton-ropes Mill.**—The Tucker & Carter Rope Co. is reported as contemplating the erection of another rope mill; present equipment 300 braiders and 250 twisting spindles.

**Raleigh—Street Improvements.**—Noe & Farrell, Pittsboro, N. C., have been awarded contract for the grading of Saunders street, previously reported; also for building culvert for the extension of street-car line through Glenwood; estimated cost \$2334.



**Raleigh—Roofing-tile Factory.**—Composite Tile Co. has been incorporated with \$25,000 capital stock to manufacture roofing tiles. E. G. Porter of Goldsboro, N. C., is president, and W. P. Rose of Raleigh, secretary-treasurer and general manager; office, Carolina Trust Building.\*

**Rose Hill—Telephone System.**—James C. Williams, Gabriel H. Robinson and Maury Ward have incorporated the Rose Hill Telephone Co. with an authorized capital stock of \$50,000 to operate telephone system.

**Salisbury—Gas and Electric-light-plant Improvements, etc.**—The Salisbury & Spencer Railway Co. is installing new coal-gas system, new alternating-current electric system and making improvements to railway system. About \$350,000 will be expended. This company was referred to last week as the Salisbury Gas & Electric Co.

**Salisbury—Stone Quarry.**—Reports state that Rowe & Roach of Greensboro, N. C., have purchased and will operate a 100-acre stone quarry near Salisbury.

**Wilmington—Publishing.**—A. L. de Rosset, W. L. de Rosset, Jr., and Benj. Motte have organized the Independent Company for the publication of the Independent, a daily newspaper.

**Winston-Salem—Underwear Factory, etc.**—Pioneer Manufacturing Co. has been organized with \$25,000 capital stock to manufacture ladies' muslin underwear. Later it is proposed to add a ladies' tailoring department. L. W. Brown is president; A. M. Brown, vice-president, and Charles C. Vaughan, secretary-treasurer. The Messrs. Brown and Vaughan were recently reported as to organize company for this purpose.

#### SOUTH CAROLINA.

**Bamberg—Electric-light Plant and Water-works.**—City will consider the application for franchise from firms and individuals for the construction of electric-light plant and water-works; G. Moye Dickinson, mayor.

**Cebu—Saw-mill, etc.**—The John H. Sizer Lumber Co. has begun the construction of proposed band-saw mill; to be two stories, 40x180 feet, with galvanized-iron roof and equipped for a daily capacity of 50,000 feet. Machinery has been purchased. The company owns extensive timber land in Horry county and will arrange for building a town. Later a dry-kiln and planing mill will be erected; main office, Sumter, S. C.

**Cheraw—Cotton Mill.**—Chas. Iceman of McColl, S. C., is mentioned in connection with plans for organizing a \$100,000 cotton-mill company.

**Gaffney—Cotton Warehouse.**—W. S. Lipscomb, R. C. Sarratt, J. V. Sarratt, E. J. Clary and G. W. Bonner will organize a company with \$5000 capital stock for the erection of a cotton warehouse.

**Jenny—Saw-mill, Grist Mill and Cotton Gin.**—J. W. Jenny & Co. (successors to Jenny & Loadholt) will rebuild saw-mill, grist mill and cotton gin reported burned last week; buildings to be of mill construction.

**Kingstree—Laundry and Ice Plant.**—It is proposed to organize company for the establishment of laundry and ice plant, and Le Roy Lee is interested.

**Rock Hill—Electric-power Plant.**—The Catawba Power Co. has begun the installation of a third generator at its plant to furnish additional power demanded in Charlotte. Present plant includes two generators of 2500 horse-power each. The third, of same capacity, is being installed, and a fourth one will be added in January; offices at Charlotte, N. C.

#### TENNESSEE.

**Chattanooga—Water-power-Electrical Plant.** Plans have been completed for the lock and dam which the Chattanooga-Tennessee River Power Co. will build at "the suck" on Tennessee river. The plans are with the War Department at Washington, and are understood to have been approved, and as soon as they are returned to the company proposals will be in order for the construction work involved. Col. John Bogart, 16 Exchange Place, New York, is the engineer in charge, and Major Henry C. Newcomer is the United States engineer at Chattanooga, who will act for the government. About 50,000 horse-power is to be transmitted by electricity to Chattanooga, which is 12 miles from the power-plant site. J. C. Guild and C. E. James of Chattanooga are the principals of the company. They have arranged for a capitalization of \$3,000,000. Other details were recently noted in these columns.

**Chattanooga—Compounding and Tank Plant.**—It is reported that Pennsylvania parties will establish a compounding and tank plant. It is proposed to build a compounding plant and erect 12 tanks each with a capacity of 14,000 gallons of oil; compound-

ing tanks to have a capacity each of 1000 gallons; capital stock \$25,000. W. H. Bagg of Chattanooga is mentioned in connection with the enterprise.

**Chattanooga—Chair Factory.**—The Chattanooga Chair Co., it is reported, has purchased the plant of the Orange Grove Lumber Co., which will be remodeled as chair factory. The present daily output of 1200 chairs will be increased.

**Clinton—Electric-light Plant and Water-works.**—Clinton Water-Works, Electric Light & Power Co. will operate electric-light and power plant and water-works. A power-house 40x60 feet will be erected. About \$25,000 will be invested. Wm. B. Crawford, Oliver Springs, Tenn., is engineer and general manager. Mr. Crawford was reported last week as having secured franchise to operate electric-light plant and water-works.\*

**Cleveland—Lead Mines, etc.**—Chartered: The Southern Lead Co., with \$55,000 capital stock, by N. I. Mayes, B. M. Tarver, J. H. Arty, J. R. Morgan and C. L. Covington, all of Chattanooga, Tenn., for the development of lead ore. It is also proposed to erect a smelter at Chattanooga, Tenn.; office East 7th street, Chattanooga, Tenn.

**Cookeville—Fertilizer Factory.**—The Cloverine Fertilizer Co. of Mt. Pleasant, Tenn., is reported as completing arrangements for the establishment of branch fertilizer factory, previously reported. It is proposed to equip plant for a daily output of eight tons.

**Erin—Agricultural-Implement Factory.**—A company has been organized with E. W. Rauscher, president; C. E. McAuley, vice-president, and E. R. Partridge, secretary-treasurer, to manufacture the "Erin" hay press.

**Johnson City—Lumber Manufacturing.**—Chartered: Iron Mountain Lumber Co., with \$5000 capital stock, by F. Littleford, U. S. Archer, Tate L. Earnest, E. H. Miller, James A. Summers and John H. Bowman, to manufacture and deal in lumber.

**Knoxville—Grain and Feed.**—The H. T. Hackney Company has increased capital stock from \$100,000 to \$300,000.

**Memphis—Cottonseed Products.**—Shelby Cotton Products Co. has been incorporated with \$10,000 capital stock by E. L. Jordan, J. R. C. Boyer, W. S. Scott and others to deal in cottonseed products.

**Memphis—Lumber Mill.**—The Bennett Hardwood Lumber Co. has increased capital stock from \$55,000 to \$100,000.

**Memphis—Saw-mill.**—The Green River Lumber Co. of Huntingburg, Ind., which is removing plant to Memphis, is reported as having begun the erection of mill on site recently purchased. Daily capacity will be 20,000 feet. About \$20,000 will be expended.

**Memphis—Machine Shops.**—H. B. Wright has contract for the erection of machine shops for the St. Louis & San Francisco Railway, referred to last week; building to be of brick and iron and cost \$16,800.

**Memphis—Railway Terminals, etc.**—It is reported that the Union Railway Co. has secured from the South Memphis Land Co. 20 acres of land in South Memphis having 800 feet of water-front, on which to erect wharves and suitable river terminals. It is stated that the company's expenditures in improvements will aggregate about \$300,000. H. G. Fleming is chief engineer.

**Nashville—Bakery.**—J. R. Williams has the contract to erect two-story brick building 80x100 feet, to be equipped as bakery for the American Bread Co. Plant will contain four ovens with a daily capacity of 7000 loaves of bread. About \$15,000 will be invested. This item was referred to last month.

**Nashville—Vinegar and Cider Factory.**—R. M. Hughes & Co. of Louisville, Ky., will establish branch plant for the manufacture of vinegar, phosphates and cider. Building has been secured and machinery is being installed.

**Tennessee—Coal Mines.**—The Montgomery Coal Co. has been incorporated with \$150,000 capital stock by Otho S. Lee, Jr., George W. Flanck and Franklin Wagner, all of Jersey City, N. J., to mine coal, etc.; office, 1 Montgomery street, Jersey City, N. J.

**Tullahoma—Overall Factory.**—The Tennessee Overall Co. has purchased site and let contract for the erection of factory building 150x50 feet, and will have accommodations for 125 machines, increasing present capacity.

#### TEXAS.

**Amarillo—Flour and Corn Mill and Grain Elevator.**—The North Georgia Milling Co. of Dalton, Ga., has begun the construction of proposed flour and corn mill; capacity to be 100 barrels of flour and 2000 bushels of corn. It is stated that a grain elevator will also be built.

**Cleburne—Canning Factory.**—M. D. Miller, previously reported as negotiating for the establishment of canning factory, will operate cannery with a daily capacity of 15,000 cans; P. O. Box 594.

**Dallas—Paper Mill.**—It is proposed to establish a paper mill, and the Hundred and Fifty Thousand Club can give information.

**Dallas—Real Estate.**—The Hubbard Building & Realty Co. has been incorporated with \$10,000 capital stock by James R. Hubbard, J. L. Dodson and A. W. Webb.

**El Paso—Railroad Shops.**—The El Paso & Southwestern Railroad Co. is having plans prepared for the construction of proposed railroad shops; J. L. Campbell, engineer M. of W., El Paso.

**Fannette—Cotton Gin.**—Henry Monvert and William Morrell contemplate installing a 70-saw cotton gin.

**Fort Worth—Electric-light, Gas, Steam-heating, Hot-water and Oil Plant.**—George W. Armstrong has secured franchise to operate electric-light, gas, steam-heat, hot-water and oil plants.

**Fort Worth—Reservoir.**—The city engineer has been authorized to advertise for plans and estimates for the construction of a reservoir with a capacity of 2,000,000 gallons.

**Houston—Construction Company.**—Chas. D. Allen, Joe E. Davis, Wilmer Waldo of Houston, Charles T. Suderman, Ben Dolson, Jr., of Galveston, Texas, and associates have incorporated the Suderman-Dolson Company with \$100,000 capital stock.

**Marble Falls—Mercantile.**—Incorporated: Christian Hulford & Co., with \$20,000 capital stock, by D. B. Holland and others.

**McKinney—Sewerage System.**—The city is considering the construction of sewerage system, and a committee has been appointed to investigate the cost, etc. Address The Mayor.

**Minneapolis—Cotton Company.**—Meeks Beard-Finberg Cotton Co. has been incorporated with \$10,000 capital stock by L. H. Beard, George Finberg of Minneapolis and T. B. Meeks of Grand Saline, Texas.

**Paradise—Cotton Gin.**—Paradise Gin Co. has been incorporated with \$5000 capital stock by W. G. Embrey, H. P. Osheides, W. M. Simpson, J. K. Reed and others.

**Seguin—Bridge.**—Guadalupe county, it is reported, will issue \$20,000 of bonds for building a bridge across the Guadalupe river near Seguin. Address The County Commissioners.

**Wills Point—Land and Oil Company.**—Incorporated: Texas Land & Oil Co., with \$50,000 capital stock, by C. E. Brown, W. C. Blanks and George A. Cardon.

#### VIRGINIA.

**Abingdon—Telephone System.**—It is reported that the East Tennessee Telephone Co. contemplates building a metallic system between Abingdon and Bristol. W. H. Boardman is superintendent of the Knoxville (Tenn.) branch.

**Abingdon—Wagon Works.**—The James A. Hagy Wagon Co. has purchased five acres of land in West Abingdon on which to erect plant, increasing the capacity. The main building will be two stories, 200x40 feet, with several smaller buildings each 150x40 feet. It is also stated that the capital stock will be increased.

**Amherst—Hardware Company.**—Chartered: Union Hardware Co., with an authorized capital stock of \$15,000. R. M. Cox is president, and O. V. Hanger, secretary-treasurer.

**Abingdon—Timber-land Development.**—The Hanning Company of Pennsylvania is completing arrangements for the development of 15,000 acres of timber land recently purchased near Abingdon.

**Ashland—Electric-light and Power Plant.**—The Virginia Light & Power Co. has been incorporated to operate electric-light and power plant, taking over the franchise recently granted to Frank J. Gould of New York, N. Y., one of the directors of the company. H. W. Anderson is president; Thos. S. Wheelwright, vice-president, and G. B. Williams, secretary-treasurer; capital stock \$100,000.

**Danville—Machine and Repair Shops.**—It is reported that the Danville & Western Railway, Theodore Parker, general superintendent, will rebuild machine and repair shops reported burned.

**Luray—Water-power-Electrical Plant.**—The Luray Gas & Electric Co. has secured water-power on the Shenandoah river at the Ruffner and Brubaker Ferry, and will arrange for the development of 600 horse-power, with a view to increasing later. An electric plant will be built for transmitting the power obtained by electricity to Luray, two miles distant. D. G. Stricker is president of the company; N. Wilson Davis, engineer, and F. E.

Stover, constructor. This item was referred to last week.

**Norfolk—Real Estate.**—The Tidewater Land Co. has incorporated with \$150,000 capital stock; R. W. Lesley of Philadelphia, Pa., president; Hugh C. Davis of Norfolk, vice-president; A. P. Page of Norfolk, secretary, and R. E. Griffith of Philadelphia, Pa., treasurer.

**Norfolk—Mercantile.**—Incorporated: Baltimore Union, with \$5000 capital stock. R. H. Riddick is president; A. T. Rauey, vice-president; D. W. Lee, secretary, and John Wilson, treasurer, all of Portsmouth, Va.

**Norfolk—Hardware Company.**—Norfolk Hardware Co. has been incorporated with an authorized capital stock of \$5000. M. E. Sewell of Windsor, N. C., is president; I. Evans Rodgers of Baltimore, Md., vice-president, and H. B. Price of Norfolk, Va., secretary-treasurer.

**Norfolk—Development Company.**—The Exposition Development Co. has incorporated with an authorized capital stock of \$3000. A. C. Ives of Norfolk is president; M. P. Henvis, vice-president, and A. D. Henvis, secretary-treasurer, both of Hampton, Va.

**Norfolk—Tannery.**—Page & Taylor are negotiating for a site for a tannery to be established by West Virginia capitalists, as stated last week. The plant is to have a daily capacity of 600 sides—oak sole leather—and \$225,000 or more will be invested. Chestnut-oak bark will be wanted, delivered at Norfolk.\*

**Norfolk—Publishing.**—Directories Publishing Co. has incorporated with \$20,000 capital stock. C. A. Vaden of Norfolk is president; C. A. Turner of Chicago, Ill., secretary, and J. K. Waterman of Norfolk, treasurer.

**Radford—Mineral Waters.**—The Carper Lithia Springs Co. has been organized with J. W. Parker, president; William Ingles, vice-president, and G. W. Lyle, secretary-treasurer, to deal in mineral water; authorized capital stock of \$10,000.

**Richmond—Iron and Steel-forging Works.**—The Richmond Forgings Co. has been organized with \$100,000 capital stock to establish iron and steel-forging plant. Jonathan Bryan is president; W. R. Williams, vice-president, and O. P. Redford, secretary-treasurer.

**Roanoke—Brick Works.**—The Roanoke Clay Manufacturing Co. has incorporated with an authorized capital stock of \$50,000 to manufacture brick, roof tiling, etc. S. W. Jamison is president; W. S. Battle, Jr., vice-president, and E. J. DeWine, manager.

**Roanoke—Railroad Shops.**—The Norfolk & Western Railroad has let contract to John P. Pettyjohn & Co. of Lynchburg, Va., for the erection of proposed frog and blacksmith shops.

**Roanoke—Sewerage System.**—C. Markley is lowest bidder and will probably receive contract for the construction of sewerage system, previously reported. About \$30,000 will be expended.

**St. Just—Gold, Silver and Copper Mining.**—The Piedmont Mining & Metallurgical Corporation, reported incorporated last week with \$500,000 capital stock to develop mineral lands in Orange county, will engage principally in the mining and treating of gold ores, silver and copper being mined as by-products. Charles Barth is president; George W. Stewart, vice-president; Robert A. Meier, secretary; Otto Wolff, treasurer (all of Philadelphia, Pa.). Correspondence should be addressed to E. W. Siegmans, 1136 Columbia avenue, Philadelphia, Pa.\*

#### WEST VIRGINIA.

**Charleston—Improvement Company.**—The Charleston Improvement Co. has been incorporated with \$20,000 capital stock by J. E. Chilton, Steele A. Hawkins, William A. Hawkins, G. O. Chilton and Henry Fry.

**Fairmont—Window-glass Plant.**—The Fairmont Window Glass Co. has purchased and will operate the plant of the Crown Window Glass Co. It is proposed to remodel the plant, and contract has been let to H. L. Dixon of Pittsburg, Pa., to change from a 12-blower pot factory to a 24-blower tank factory.

**Fairmont—Construction Works.**—Rinehart & Dennis have contract to fill in Coal Run, the ravine dividing Fairmont. Sixteen acres of ground will be made, and about \$1,000,000 will be expended.

**Fayetteville—Coal and Timber Lands.**—D. C. T. Davis, Jr., of Charleston, W. Va., has purchased from the J. L. Beury estate a tract of 32,000 acres of coal and timber land in Fayette and Greenbrier counties, and plans for the development of the property are now being prepared. The sale was made through Messrs. Watts, Gaines, Davis & Matthews of Charleston, and the price paid

is said to have been \$350,000. The property carries the New River coal vein, besides being heavily timbered. It is reported that the buyer represents Richmond capitalists allied with Chesapeake & Ohio interests.

**Morgantown—Glass Factory.**—The Star Glass Co. will begin operation in about 60 days, manufacturing lamp chimneys, shades and pressed ware. Five buildings are being erected, the dimensions of which are as follows: 80x90 feet, 60x90 feet, 40x50 feet, 30x40 feet and 80x100 feet. About \$50,000 will be invested. Louis Kauffeld is engineer in charge. J. W. Wiles is president; Lee R. Shriver, vice-president, and W. W. Smith, secretary-treasurer.

**Morgantown—Coal Mines and Coke Ovens.** It is stated that Stephen B. Elkins and Henry G. Davis of Elkins, W. Va., are planning the construction of a railway along the Elk river in order to provide facilities for the extension of developments by the West Virginia Coal Co. of Morgantown, in which they are largely interested. This company owns 45,000 acres of land, much of which is yet to be developed, and the opening of new mines and the construction of coke ovens will follow the railway's completion.

**New Martinsville—Glass Factory.**—Magnolia Window Glass Co. has been incorporated with \$50,000 capital stock by S. R. Martin, Jacob Koontz, John Starum and John C. McElowney to manufacture and deal in window glass, etc. Messrs. Martin and Stender were previously reported as having purchased the plant of the Wetzel Window Glass Co.

**Ohio County—Coal-land Developments.**—Reports state that Robert Carroll of Waynesburg, Pa., and associates have purchased 5000 acres of coal land in Ohio county and will probably arrange for its development.

#### INDIAN TERRITORY.

**Fort Gibson—Excelsior and Box Factory.**—Robert Holt & Co., reported last week as to invest \$15,000 in the establishment of excelsior and box factory, will operate excelsior factory with a capacity of from 6 to 10 tons daily, manufacture berry boxes, etc.

**Pauls Valley—Windmill and Pump Factory.** T. B. Fager, representing a windmill and pump manufacturing plant of Freeport, Ill., is investigating relative to removal of plant to Pauls Valley.

**Purcell—Construction Company.**—Incorporated: The Canadian Valley Construction Co., with \$30,000 capital stock, by W. G. Wallen, W. H. Wallenberger and W. G. Blanchard.

**South McAlester—Drug Company.**—W. S. Ambrose, A. T. Dawson, George Miller and associates have incorporated the Palace Drug Co. with \$25,000 capital stock.

#### OKLAHOMA TERRITORY.

**Beaver—Cotton Gin and Grist Mill.**—Chartered: The Beaver City Gin & Milling Co., with \$3000 capital stock, by H. D. Mense, Elbert Clift, J. W. Webb, Frank Laughlin, E. Y. Ogilvie and F. C. Tracey, to operate cotton gin and grist mill.

**Davidson—Supply Company.**—The Davidson Co-operative Supply Co. has been incorporated, with \$25,000 capital stock, by William A. Bell, I. W. Yancy, J. H. Goodrich, J. Will Crawford and J. M. Hickerson.

**Gotebo—Cotton Gin and Grist Mill.**—The Farmers' Union Gin & Mill Co. has been incorporated with \$8000 capital stock by Claude Rhodes of Gotebo, John Gels, H. L. Gels, T. W. Hopper, J. B. Cook and T. H. Harris of Komalty, O. T.

**Hydro—Cotton Gin, etc.**—John Reinerson, Peter Ollerty and W. H. Henke have incorporated the Farmers' Gin & Cotton Co. with \$5000 capital stock.

**Medford—Creamery and Ice Plant.**—W. S. Long, J. G. Gilliland, Jacob Rath, E. E. Flora and Jacob Hauser have incorporated the Medford Creamery & Ice Co. with \$20,000 capital stock.

**Oklahoma City—Coal and Lumber Company.**—The Western Coal & Lumber Co. has been incorporated with \$25,000 capital stock by John L. Hicks, Lloyd Hicks and L. G. Russell.

**Oklahoma City—Oil Wells.**—The Mutual Oil Co. has been incorporated with \$500,000 capital stock by A. P. Crockett, Charles E. Johnson of Oklahoma City, William Newton, John Blanchard of St. Paul, Minn.; A. W. Salland and M. L. Snyder of Fort Madison, Iowa.

**Quay—Telephone System.**—Incorporated: The Quay Rural Telephone Co., with \$2000 capital stock, by J. W. Shipley, O. F. Hutchinson, C. M. Frowant and P. H. Stultz.

**Tecumseh—Mercantile.**—A. Lettchman of St. Louis, Mo., and associates have incorpo-

rated the Tecumseh Mercantile Co. with \$5000 capital stock.

**Woodward—Lumber Company.**—Incorporated: The C. E. Sharp Lumber Co., with \$10,000 capital stock, by C. E. Sharp of Woodward, William E. Sharp and W. H. Sharp of Chicago, Ill.

**Woodward—Cotton Gin.**—The Woodward Cotton Co., reported incorporated last week, has completed organization with John Raynor, president; John Garvey, vice-president, and A. W. Anderson, secretary-treasurer. A building 50x75 feet will be erected and equipped for ginning cotton having a daily capacity of 25 bales. About \$8000 will be invested.

#### BURNED.

**Alma, Texas.**—Stringer & Linville's cotton gin.

**Ashwood, Tenn.**—Walker & Jones' barrel factory.

**Danville, Va.**—Danville & Western Railway Co.'s machine and repair shops, loss \$1500; Theo. Parker, general superintendent.

**Georgetown, S. C.**—The Atlantic Coast Lumber Co.'s planing mill; loss about \$75,000.

**Gold Hill, N. C.**—Gold Hill Copper Mining Co.'s boiler-house; loss \$5000.

**Havre de Grace, Md.**—Lawder Bros. Can Co.'s plant; loss \$15,000.

**Huntsville, Texas.**—The Huntsville Cotton Oil Co.'s cotton gin and grist mill.

**Jackson, Tenn.**—Jackson Woolen Mills; loss reported at \$100,000.

**Jacksonville, Texas.**—Jacksonville Ice Co.'s plant, loss \$35,000; Jacksonville Compress Co.'s plant, loss \$2000.

**Jasper, Fla.**—The Jasper Manufacturing Co.'s planing mill and dry-kill.

**Johnston, S. C.**—The Johnston Warehouse Co.'s cotton warehouse.

**Livingston, Texas.**—The Lamont Lumber Co.'s plant.

**Mobile, Ala.**—McDonald Lumber Co.'s saw-mill.

**Plauchville, La.**—Ogee Lacour's saw-mill; loss \$1200.

**Richmond, Va.**—Johnston & Co.'s paper-box factory; loss \$5000.

**Sacul, Texas.**—J. C. Marshall's saw-mill; loss \$1500.

**Sandersville, Miss.**—The Sandersville Gin Co.'s cotton gin; loss \$6500.

#### BUILDING NOTES.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

**Barnesville, Ga.**—Apartment-house.—C. O. Summers, C. H. Humphrey, Roy Blount and Sanders Walter have purchased site on which to erect a \$10,000 apartment-house.

**Baton Rouge, La.**—Lodge Building.—The local lodge of Elks has purchased site on which to erect proposed two-story building after plans by C. H. Charlton.

**Beaumont, Texas—Church.**—F. S. Glover, architect, Houston, Texas, has been authorized by the board of trustees of the First Methodist Church to advertise for bids to be opened September 20 for the erection of edifice previously mentioned. V. A. Godby is pastor.

**Birmingham, Ala.**—Clubhouse Improvements.—The Southern Club, James Weatherly, president, contemplates expending \$13,000 in improvements; to put in a cafe 24x72 feet, with mosaic tile floor, etc., install steam heating plant, etc.

**Boydton, Va.**—Town Hall.—The town has purchased site on which to erect proposed \$2000 brick hall. Address Town Clerk.

**Boynton, Fla.**—Hotel Improvements.—It is reported that an addition will be built to the Boynton Hotel.

**Clarksburg, W. Va.**—School Buildings.—Edw. J. Woods, architect, has plans for two school buildings, each 84x70 feet, rubble-stone foundation, slate roofing with ornamental iron ridge rolls, etc. Bids for the construction will be asked in about three weeks.

**Clearwater, Fla.**—Business Building.—J. R. Davey has let contract for the erection of three-story brick and stone building.

**Clio, S. C.**—School Building.—Board of Trustees will receive bids until September 12 for the erection of brick school building. Plans and specifications can be had from J. H. Sams, architect, Columbia, S. C. Usual rights reserved.

**Covington, Ky.**—Infirmary.—Reports state that Kelley & McDermott have contract at

\$106,000 for building proposed county infirmary.

**Cumberland, Md.**—Firehouses.—City has let contract to George W. Cameron for building firehouse on Market Square, and to J. H. J. House & Co. for firehouse to be built on Browning street.

**Dallas, Texas—Business Building.**—The Texas Seed & Floral Co. has let contract to Chrisman & Nesbitt for the erection of proposed four-story building 50x110 feet. Harry H. Overbeck prepared the plans.

**Dallas, Texas—Cathedral.**—The directors of the Dallas Scottish Rite Cathedral Association have adopted plans by Hubbell & Greene for cathedral, previously reported; to be two stories, 150x120 feet, and cost \$100,000, exclusive of furnishings.

**Dallas, Texas—Office Building.**—Sealed bids marked "Proposals for Praetorian Office Building" and addressed to C. B. Gardner, Praetorian Building, Dallas, Texas, will be received until September 25 for the construction of a steel-frame fireproof 14-story office building, including installation of plumbing, steam heating, electric wiring and elevators, according to plans and specifications to be seen at office. Separate bids for furnishing the steel and erection of same will be considered at the same time and place. Information furnished on application. Usual rights reserved.

**Edwards, Miss.**—Store Building.—The Southern Construction Co. of Vicksburg, Miss., has contract for the erection of brick store building for P. C. Bankston.

**El Campo, Texas—School Building.**—The Bailey Mills Co., Victoria, Texas, has contract at \$5500 for constructing brick additions to school building for which Jules Leifland, Victoria, Texas, prepared the plans.

**Elm Grove, W. Va.**—Infirmary.—The Board of County Commissioners has awarded contract to J. W. Beltz & Sons Co., Wheeling, W. Va., at \$4350 for building addition to the Elm Grove Infirmary.

**Ensley, Ala.**—Library.—Breeding & Whildin, Birmingham, Ala., have been engaged to prepare plans and specifications for proposed Carnegie Library to be erected at a cost of \$10,000.

**Galveston, Texas—Office Building.**—J. Lobitz, Maco Stewart and A. Ferrier have organized the Security Building Co. to remodel as office building the Kauffman & Runge Building, recently purchased. It is estimated that about \$35,000 will be expended.

**Goldsboro, N. C.**—Lodge Building.—Charles P. Snuggs of Raleigh, N. C., has contract to erect proposed building for the I. O. O. F.; building to be of brick with granite trimmings and cost \$8000.

**Goldsboro, N. C.**—Lodge Building.—Ruffin Lodge No. 6, K. of P., has purchased site on which to erect lodge building.

**Greenville, S. C.**—Fair Buildings.—The Piedmont Fair Association has let contract to the Gallivan Building Co. for the erection of buildings and stables on the fair grounds; cost \$10,000.

**Greenwood, Miss.**—Store Building.—Samuel J. Stein is having plans prepared for a three-story store building.

**Haynesville, Ala.**—Courthouse Improvements.—Board of Revenue of Lowndes county, Haynesville, Ala., will receive bids until September 11 for repairs and extensions to courthouse. Plans and specifications on file at office of clerk of board, also at the Builders' Exchange, Louisville, Ky., and at Room No. 217, Tyler Building, Louisville, Ky. Certified check for \$15,000 must accompany each bid. Usual rights reserved.

**Hot Springs, Ark.**—Business Building.—R. P. Morrison, architect, will receive bids until September 12 for the erection of a three-story brick, stone and wood building for Hamp Williams. Plans can be seen at architect's office. Certified check for \$500, payable to Hamp Williams, must accompany each bid. Usual rights reserved.

**Hot Springs, Ark.**—School Building.—The Secretary of the School Board has been authorized to advertise for bids for the erection of proposed \$11,000 school building for colored children. C. H. Parsons prepared the plans.

**Houston, Texas—Warehouse.**—Bids are being received for the erection of two-story brick warehouse for W. L. McAtee & Sons; Cook & Co., architects.

**Huntsville, Ala.**—Warehouse.—The Farmers' Warehouse Co., reported last week as being organized to erect a cotton warehouse, has completed organization with Walter Kelly, president; N. M. Rowe, vice-president; Lee Ford, secretary, and John M. Hampton, treasurer; capital stock \$20,000. Site has been secured.

**Jacksonville, Fla.**—Bank Building.—The Florida Bank & Trust Co. has let contract

to Owens & Son for the erection of proposed addition, 35x94 feet; front to be of white marble.

**Jacksonville, Fla.**—Dwelling.—George W. Parkhill has had plans prepared by W. B. Camp for the erection of \$10,000 residence.

**Kansas City, Mo.**—Store, Office and Hotel Building.—Charles H. Child, proprietor Melba Hotel, it is reported, will erect a four-story combination store, office and hotel building; cost \$50,000.

**Knoxville, Tenn.**—Lodge Building.—The Supreme Commandery of the United Order of the Golden Cross has purchased site 65x90 feet on which to erect a four-story building at a cost of \$50,000.

**Knoxville, Tenn.**—Warehouse.—The Brookside Mills has let contract for the erection of a five-story warehouse to have a capacity of 10,000 bales of cotton. Automatic sprinklers, wet system, steam heat, electric elevators will be installed.

**Knoxville, Tenn.**—Warehouse.—H. O. Nelson is completing arrangements for the erection of proposed \$26,000 warehouse; to be of brick with concrete foundation.

**Memphis, Tenn.**—Warehouse.—John Farrelly has permit to erect two-story brick warehouse to cost \$10,000.

**Memphis, Tenn.**—Lodge Building, etc.—E. M. Apperson has contract to erect building for the Italian Society (previously reported) after plans by Chighizola, Hanker & Cairns; to be three stories, 135x45 feet, with white limestone front, and cost \$25,000.

**Memphis, Tenn.**—Shipping Station and Warehouse.—C. J. Wagner Lumber & Manufacturing Co. has contract to erect building for the Linden Shipping Co., for which Chighizola, Hanker & Cairns were previously reported as preparing plans; to be three stories, 150x426 feet, of brick and stone, steel construction; to cost about \$250,000.

**Memphis, Texas—Lodge and Store Building.**—B. T. Williams has contract to erect a double two-story stone building 50x100 feet for Memphis Lodge No. 729, A. F. and A. M., and W. P. Cagle.

**Midland, Texas—Courthouse.**—The Commissioners' Court of Midland county has let contract to Wm. Martin of Comanche, Texas, at \$26,000 for the erection of proposed courthouse.

**Moody, Texas—School Building.**—Trustees Moody Independent School District will receive bids until September 11 for the erection of \$10,000 brick school building. Plans and specifications can be seen at the First National Bank, Moody, Texas, or at office of Sam P. Herbert, architect, Waco, Texas. Usual rights reserved.

**New Orleans, La.**—Bank and Office Building.—The Whitney Central Bank, previously reported as a consolidation of several banks and to erect 11-story bank and office building, has secured site on which to erect proposed building.

**Oklahoma City, O. T.**—School Building.—Bids will be received until September 11 by the Secretary of the Board of Education for the erection of a two-story school building. Separate bids will be received on the general contract for the building, the heating and plumbing. Certified check for \$500, made payable to the secretary, must accompany each bid. Plans and specifications can be seen at the office of D. W. F. Turlyfill, architect, Bassett Building. Usual rights reserved.

**Paducah, Ky.**—Store Building.—Acree & Nieman have contract to erect three-story brick and stone store building for Frank Kirchoff after plans by O. D. Schmidt; cost \$5000.

**Parkersburg, W. Va.**—Business Block.—J. A. Wetherell has let contract to J. M. Carter for the erection of proposed business block.

**Portsmouth, Va.**—Church.—Plans by R. H. Hunt, Chattanooga, Tenn., have been adopted for the erection of proposed \$15,000 brick and stone edifice for Calvary Baptist Church.

**Roanoke, Va.**—Store Building.—Tatterson & Thuman, Norfolk, Va., have contract for the erection of six-story store building 75x192 feet for Watt, Retter & Clay. Baldwin & Pennington, 311 North Charles street, Baltimore, Md., were previously reported as preparing plans for building.

**Salisbury, N. C.**—Business Block.—It is reported that E. P. Wharton of Greensboro, N. C., and associates will erect a \$50,000 business block.

**Savannah, Ga.**—Coal Chute.—It is reported that T. S. Tutweller, engineer of roadway Atlantic Coast Line Railway, Savannah, Ga., is preparing plans for a coal chute to be erected by the company; capacity 10,000 tons.

**Sherman, Texas—Church.**—The Southwest Construction Co. has contract at \$16,000 for the erection of edifice for the Catholic church, previously mentioned.



South McAlester, I. T.—Dwelling.—W. P. Freeman is completing arrangements for the erection of proposed \$6000 residence.

Spartanburg, S. C.—School Building.—Hertog & Son have contract to erect \$22,000 school building, previously reported.

Spartanburg, S. C.—Theater.—James T. Harris will erect a theater. Neither architect nor engineer have been engaged.\*

Spray, N. C.—Cottage.—J. M. Hopper has contract to erect two-story cottage for J. D. Turner, Jr., after plans by R. S. Smith of Asheville, N. C.; to be of ordinary construction, equipped with warm-air furnace, electric or acetylene lighting fixtures, venetian blinds, open brick wood fireplaces; water to be put through house and barn with hydraulic ram.\*

Stephenville, Texas.—Jail Building.—The Southern Structural Steel Works of San Antonio, Texas, has been awarded contract at \$28,000 for the erection of jail building for Erath county, previously reported.

Stevenson, Md.—Stable.—H. Carroll Brown has let contract to John Waters, 23 East Centre street, Baltimore, Md., for the erection of stable for which Darrach & Beekman, New York, N. Y., were previously reported as preparing plans; building to be 37x150 feet, with two extensions each about 65x24 feet. A hot-water-heating plant will be installed.

Sturgis, Ky.—Storage Warehouse.—The West Kentucky Coal Co. will erect steel buildings for storing output of its mines.

Terrell, Texas.—Asylum Buildings.—H. W. Link of Dallas, Texas, has contract at \$11,928 for the erection of addition to main building at the North Texas Insane Asylum, and Inis & Hill of Dallas, Texas, at \$61,622 for building male annex No. 2 and female annex No. 2. The contract for the heating plant has been let to Tension Bros., Dallas, Texas, at \$6569.

Towson, Md.—Dwelling.—Rev. William H. Hubbard of Brooklyn, N. Y., has purchased site on which to erect residence.

Washington, D. C.—Bank Building.—Ashbey T. Swann, 62 K street N. W., has contract to erect fireproof bank building for Thomas W. Stubblefield referred to last week. T. F. Schneider prepared the plans. Hot-water heating plant and electric lights will be installed; cost \$30,000.

Washington, D. C.—Business Building.—Bids will be opened September 12 for the erection of business building by Hugo Worch, 923 F street N. W., previously reported; structure to be five stories, 25x118 feet, of ordinary construction, equipped with hot-water heating plant, electric lights, electric elevator, and cost \$35,000. Frank B. Meyers, Bond Building, prepared the plans.

Washington, D. C.—Apartment-house.—The N. T. Haller Company is preparing plans for a three-story apartment-house to be erected by Charles W. King at a cost of \$40,000.

Washington, D. C.—Dwelling.—Sonneman & Hastor are preparing plans for a two-story dwelling to be erected by Worthington C. Ford at Chevy Chase, a suburb of Washington; cost \$12,000.

Waycross, Ga.—Lodge Building.—The Elks Company, previously reported incorporated with \$25,000 capital stock to erect lodge building, will build a two-story brick structure at a cost of \$5000. Site has been purchased.

Williamsburg, Va.—Theater.—It is reported that A. W. Jennings contemplates the erection of theater; to be of frame, 80x100 feet.

Wilmington, N. C.—Apartment-house.—Bids will be asked about December 1 for the erection of a five-story apartment-house of brick and terra-cotta, for which H. E. Bonitz was reported last week as preparing plans. A hot-water heating plant, gas and electric lights, electric passenger elevator will be installed; cost \$40,000. A stock company has been organized to erect and operate same.

Wilmington, N. C.—Business Building.—Justin M. Bunting is arranging for the erection of a two-story brick business building on site recently purchased.

Winston-Salem, N. C.—Hotel.—Forsyth Hotel Co., A. H. Galloway, secretary, has adopted plans by Hook & Rogers for the erection of hotel building, previously reported; building to be 4½ stories, 100x158 feet, of semi-mill construction, equipped with steam heat, electric lights, and cost from \$80,000 to \$100,000. Bids for the construction will be asked in about two weeks.

#### Wants Civil Engineers.

The services of two young civil engineers are wanted for trolley-railway work near Washington, D. C. They are required to have instruments for transit and level work and topography. Particulars regarding this opening can be obtained by addressing R. H. Phillips, 1406 G street N. W., Washington, D. C.

## RAILROAD CONSTRUCTION.

### Railways.

Albertville, Ala.—Mr. John L. Ray informs the Manufacturers' Record that the North Alabama Railway, Light & Power Co. proposes to build a line from High Falls at Elrod's Mill in DeKalb county to Albertville, Boaz, Whitesville, Attalla and other points. The directors are J. G. Elrod, president; W. A. Elrod, vice-president and business manager; W. M. Coleman, secretary; T. B. McNaron, treasurer, and George M. Rains.

Anniston, Ala.—It is reported that Colonel Montgomery, civil engineer, of Birmingham, is surveying for a railway from Jacksonville to Anniston, Ala., 12 miles. The Seaboard Air Line Railway is said to be behind the movement.

Ashland, Ky.—It is announced that the Great Central route (the Cincinnati, Hamilton & Dayton system) and the Pere Marquette will build a 125-mile road from Ashland, Ky., south through Pike, Knott and Letcher counties in Southeastern Kentucky, with ultimate purpose of reaching the Atlantic coast at Charleston, S. C. Mr. Eugene Zimmerman of Cincinnati is president.

Ashland, Va.—The Virginia Light & Power Co. of Ashland, Va., capital \$25,000, is reported to have been granted a charter to build a line from Richmond, Va., to Ashland and the Northern Neck of Virginia. The incorporators are H. W. Anderson, president; T. S. Wheelwright, vice-president; G. B. Williams, secretary and treasurer, all of Richmond.

Atlanta, Ga.—The Atlanta & Birmingham Railway Co. has elected H. M. Atkinson of Atlanta to be president in place of W. G. Raoul, resigned. The other officers are Geo. D. Wadley, vice-president; W. J. Swain, auditor, and R. J. Redding, secretary. Captain Raoul continues as a director, the other members of the board being H. M. Atkinson, George Dole Wadley, Morris Brandon, P. S. Arkwright of Atlanta, Gordon Abbott of Bartow, Percy R. Pogue and F. L. Ethbridge of New York.

Baltimore, Md.—Negotiations are reported closed by a New York syndicate for the purchase of the Suffolk & Carolina Railway, which extends from Suffolk, Va., to Edenton and Elizabeth City, N. C. Wm. H. Bosley is president of the railway at Baltimore.

Baltimore, Md.—The proposed Drum Point Railroad, to run through Anne Arundel, Prince George's and Calvert counties, is reported to have been purchased by interests representing the Wabash and other Gould lines, and it is said the work of completing the line is to be started immediately. The charter name of the road is the Baltimore & Southern Railroad Co. L. M. Shute of Shute & Arnold, 150 Nassau street, New York, is said to be the purchaser.

Batesville, Ark.—Construction has begun on the Missouri, Arkansas & Southwestern Railroad.

Chicago, Ill.—Reported from Birmingham, Ala., that the Illinois Central will build a line from Corinth, Miss., via the Bear creek valley to connect with the Northern Alabama Railroad near Haleyville, Ala., for the purpose of establishing a line to Birmingham in connection with the latter and the Frisco system. A. S. Baldwin is chief engineer at Chicago.

Chicago, Ill.—Work is reported to have begun on the Illinois Central Railroad's belt line, which is to run from Woodstock to the Nonconah yards in the southern part of Memphis, Tenn., W. J. Hutton of Memphis and Lorimer & Gallagher of Chicago having the contract to grade and build that portion between Woodstock and Leewood, Tenn., seven and one-half miles. A. S. Baldwin is chief engineer.

Cincinnati, Ohio.—The Alabama Great Southern Railway is reported to be seeking authority in Birmingham, Ala., to build a track on 14th street to 1st alley; thence to 15th street up the alley. G. B. Nicholson is chief engineer.

Cincinnati, Ohio.—The Alabama Great Northern Railroad is reported to have begun construction of a new yard at Birmingham, Ala., and will lay four tracks immediately with a capacity of about 300 cars. G. B. Nicholson is chief engineer.

Cincinnati, Ohio.—The Cincinnati, New Orleans & Texas Pacific Railway will, it is reported, make an addition to the yards of the Belt Railway at Chattanooga, Tenn. Additional yards may also be constructed. G. B. Nicholson is chief engineer at Cincinnati.

Cleburne, Texas.—Mr. M. D. Miller, Box 594, writes the Manufacturers' Record that an electric railway from Cleburne to Glen Rose, 24 miles, is desired. It is said that a bonus of \$20,000 and right of way could be secured for such a line.

Cynthiana, Ky.—An effort is being made, it is reported, to get the Louisville Southern Railroad to extend its line from Georgetown to Cynthiana, about 18 miles.

Crossville, Tenn.—J. Q. Burnett is reported to be securing rights of way for the proposed new railroad from Crossville to Jamestown, about 28 miles.

Davis, I. T.—Reported that the Coalgate Southwestern Railway Co. will begin construction at Davis on September 15.

Elkins, W. Va.—Henry G. Davis and Stephen B. Elkins will, it is reported, build a railroad from Holly Junction up the Elk river valley, connecting with the Coal & Coke Railway.

Florenville, La., via Audubon, La.—McKinney & Oliver offer to sublet eight miles of earth work in Northern Louisiana and Southern Mississippi for the line of the New Orleans Great Northern Railroad, about half of it being embankments from 8 to 12 feet.

Fort Worth, Texas.—The Lovejoy Construction Co. of Fort Worth has, it is reported, been awarded a contract by E. P. Spears of Dallas, Texas, to grade 10 miles of an electric railway from Sulphur, I. T., to Davis, I. T. The line from Sulphur to Oklahoma City will be 84 miles long.

Fourche (P. O. Esau), Ark.—Mr. F. H. Hartsorn, president of the Fourche River Valley & Indian Territory Railway Co., which has a line from Esau nine miles southeast, writes the Manufacturers' Record that it is proposed to build an extension of about 35 miles to the county line of Perry county, about two miles south of Jennings Falls. Engineer not yet employed, nor is it decided whether a contract will be let or that the company will do the work.

Frederick, Md.—The Frederick & Middleton Electric Railroad, which extends between the points named, across the Catocton mountain, eight miles, is reported to have been purchased by a syndicate. J. Roger McSherry, counsel for the Baltimore & Frederick Electric Railway Co., which is to build from Baltimore to Frederick, is quoted as saying that the latter is the purchaser. Jas. E. Ingram, Jr., is president at Baltimore.

Galveston, Texas.—The Gulf, Colorado & Santa Fe Railway has applied for a franchise to build two additional tracks upon Avenue C or Mechanic street from the east line of 41st street to the western city limits. C. F. W. Felt is chief engineer.

Galveston, Texas.—The Galveston Terminal Railway Co. of Galveston has been chartered with \$25,000 capital to operate a railroad from the eastern shore of Galveston bay, near lot No. 525, section 1, easterly across the island to the western limits of the city. The incorporators are M. Marz, B. Adoue, I. H. Kemper, Abe Blum, E. R. Chessborough, R. Markwell, John Sealy, Charles Fowler, Leon Blum of Galveston and Sam Lazarus of St. Louis.

Galveston, Texas.—The Santa Fe has, it is reported, begun construction of its branch from Glen Flora to El Campo. C. F. W. Felt is chief engineer.

Goldsboro, N. C.—It is reported that the Atlantic & North Carolina Railroad will extend its line from Beaufort to Cape Lookout, N. C. R. P. Foster is general manager at Goldsboro.

Hopkinsville, Ky.—Mr. George V. Green, member of the Kentucky State Prison Commission, writes from Hopkinsville to the Manufacturers' Record that survey is now being made for a switch to be built from Eddyville, Ky., on the Illinois Central Railroad, to the branch penitentiary, about a mile distant.

Houston, Texas.—Mr. Frank P. Read of the firm of P. M. Johnston & Co., railroad contractors, writes from Mexia, Texas, to the Manufacturers' Record that they have begun work on the Trinity & Brazos Valley Railroad's cut-off from Mexia to Houston. P. G. Burns, chief engineer at Mexia, may be addressed.

Houston, Texas.—The Port Arthur & Houston Short Line has established offices in the Opera House Block and is pushing construction. C. S. Cleaver is in charge.

Houston, Texas.—The Houston Belt Line & Terminal Co. has been organized to build a line about 20 miles long. The incorporators are Sam Lazarus of St. Louis, John Summerfield, H. N. Tinker, Hyman Levy, J. M. Rockwell, Ed H. Harrell, B. F. Bonner, Tolbert Fannin, L. W. Murdock and J. G. Logue of Houston. It is said to be a Yoakum proposition.

Houston, Texas.—Contract is reported let to W. O. Robertson of San Antonio for building the Southern Pacific extension from Stockdale to Cuero, Texas, 47 miles.

Houston, Texas.—W. S. Hipp & Co. of Houston, contractors, have, it is reported,

begun work at Mexia, Texas, on the extension of the Houston & Texas Central Railroad. L. A. Cottingham is chief engineer at Houston.

Kansas City, Mo.—The Kansas City, Mexico & Orient Railway has, it is reported, made a reconnaissance survey from San Angelo, Texas, to Del Rio, Texas, for the purpose of making a connection through to the city of Mexico. M. P. Paret is chief engineer, Kansas City.

Louisville, Ky.—Grading is reported finished on the Louisville & Nashville extension from Knoxville to Wetmore, Tenn., and the line may be completed by October 1. About 40 miles of track have been laid. From Wetmore to Cartersville, Ga., the line may be finished by November 1, and the entire line from Knoxville to Cartersville is to be completed by January 1. W. J. Oliver & Co. are the contractors from Knoxville to Wetmore, and Wright, Williams & Wadley from Wetmore to Cartersville.

Mayfield, Ky.—It is reported that construction is about to begin on the Calro & Tennessee River Railroad, which is to run from Bristol, Tenn., to Fort Jefferson, Ky., via Mayfield. B. A. Neal is president.

Merkel, Texas.—Reported that a bonus of \$10,000 has been raised in Merkel for a north and south trunk line promoted by Wm. A. Butts, said to represent Eastern capitalists.

Midville, Ga.—It is reported that construction is about completed on the Augusta & Florida Railway from Augusta to Keysville. W. M. Blount is vice-president and general manager.

Mobile, Ala.—President Bird M. Robinson of the Mobile, Jackson & Kansas City Railroad is reported as saying that "the new line, running from Mobile through Mississippi to Middleton, Tenn., 403 miles, will be completed by September 5." H. S. Jones is chief engineer at Mobile.

Montrose, Miss.—Reported that the Montrose Lumber Co. is building five miles of railroad to connect its plant with timber lands.

Moultrie, Ga.—W. C. Vereen and W. H. Smith of Moultrie have, it is reported, purchased 25,000 acres of timber land in Jefferson and Leon counties, Florida, and will build a railroad to develop it.

Muskogee, I. T.—The Tulsa, Turnersville & Texas Railroad has been chartered with \$3,500,000 capital to build a line, it is reported, from the northeastern corner of Indian Territory via Muskogee and Tulsa to Shawnee, O. T., 175 miles. The incorporators are Fred E. Turner, V. N. Sayre, W. S. Harsh, Philip B. Hopkins, all of Muskogee, and Joseph W. McNeal and William M. Spurlock of Guthrie.

Norfolk, Va.—Sands & Oliver of Roanoke, contractors for the first 100 miles of the Tide-water Railway, have, it is reported, turned over to McArthur Bros. of Pittsburgh and Chicago 32 miles of the line from Sewall's Point to Kilby, Va., which is to be completed by November 1.

Ocala, Fla.—A. P. Stuckey of Ocala, first vice-president of the Gainesville & Gulf Railway, is reported as saying that a preliminary survey will be made immediately for the proposed extension from Fairfield, Fla., to Tampa, Fla., 105 miles. Also that it is proposed to secure right of way and begin grading immediately after the line is located, which is expected within 30 days. Rails have been ordered, delivery to begin about September 15, and ties are being cut. J. W. Patton and A. W. Raylor, with a force of assistants, have been employed by Mr. Stuckey for the survey.

Oklahoma City, O. T.—Grading is reported begun by J. H. Martin on the line of the Oklahoma Interurban Traction Co. to Capitol Hill, the principal promoters of which are C. V. Eggleston, of Oklahoma City and J. H. Patterson of Ada, O. T.

Pauls Valley, I. T.—A letter to the Manufacturers' Record says that incorporation articles for the Pauls Valley & Coalgate Railroad are in the hands of local attorneys. The backers of the project are not known.

Pelham, Ga.—The Pelham, Bainbridge & Gulf Railroad Co. has been chartered to build a railway from the Atlantic Coast Line at Pelham via Bainbridge to Fairchilds, Ga., on the Chattahoochee river, 52 miles. Later it is said the road will be extended to a point on the Gulf coast. Among the incorporators are J. L. Hand, J. W. Everett and D. C. Barrow of Pelham.

Pineville, Mo.—Mr. J. A. Sturges, president, writes from Pineville to the Manufacturers' Record confirming the report that the Pineville & Northern Railway Co. has been chartered to build a 40-mile line from Pineville to some point on the Frisco, probably Monett. Arrangements toward making survey are now being made, and in a short time the company hopes to be in a position to

open up the matter of financing, grading and construction. The other officers of the company are Oakley St. John, vice-president, Pineville; John B. Christensen, general counsel, St. Louis; A. W. Nowl, secretary, and E. E. Coffee, treasurer, both of Pineville.

Nashville, Tenn.—An officer of the Nashville, Chattanooga & St. Louis Railway in a letter to the Manufacturers' Record denies the press report that the company would build another spur track from Tullahoma to Havenscroft, Tenn.

Pittsburg, Pa.—Reported that the Pennsylvania Company will enlarge its freight yards at Wheeling, W. Va., having purchased land. Thomas Rodd is chief engineer at Pittsburg.

Portsmouth, Va.—The Seaboard Air Line is reported to be completing a survey from Tallahassee, Fla., to Perry, Fla. W. W. Gwathmey is chief engineer at Portsmouth.

Richmond, Va.—D. A. Langhorne of Lynchburg, Va., has, it is reported, purchased 32,000 acres of land for Chesapeake & Ohio Railway interests on Meadow river in Fayette, Greenbrier and Nicholas counties, West Virginia. It is said that a railroad extension will be built. F. I. Cabell is engineer of construction at Richmond.

Roanoke, Va.—The Vaughan Construction Co. writes the Manufacturers' Record that contract has been awarded them for 12 miles of railroad from Town Creek on the Winston-Salem division of the Norfolk & Western Railway to Stuart's Knob in Patrick county, Virginia, contract being let by the Virginia Ore & Lumber Co. of Roanoke. Frank A. Hill and H. D. Lafferty are said to be interested in the lumber company.

Sanford, N. C.—Reported that grading will soon begin on the Sanford & River Valley Railway, in which W. J. Tally, A. L. McNeill and others are interested.

San Marcos, Texas.—B. G. Neighbors is quoted as saying that all the rails for the construction of the proposed San Marcos Valley Interurban Railway from San Marcos to Luling, Texas, 26 miles, has been arranged and money is in bank for the work. Bids for construction will be requested immediately.

Savannah, Ga.—Bids are being asked. It is reported, for the widening of the Central of Georgia Railway's narrow-gauge line between Columbus and Greenville and the construction of a line from Greenville to Newnan, 24 miles, rights of way having been secured. H. M. Steele is chief engineer.

Shreveport, La.—Clarence Ellerbe, assistant to the president, is quoted as saying that the Louisiana Railway & Navigation Co. has graded 25 miles south of Baton Rouge on its New Orleans extension, and 12 miles of track are laid. Grading is also in progress north from Litcher to meet the former.

Shrewsbury, Pa.—Reported that the Mason & Dixon Mining Co. of Shrewsbury will extend the Bachman Valley Railroad from Ebbvale, Md., to a point near Westminster, Md., about four miles. Among those interested are A. B. Collins, Dr. C. H. Gerry, W. F. Meyers, John Wolz, W. G. Allen and W. H. Meyers.

St. Louis, Mo.—The St. Louis, Iron Mountain & Southern Railroad (Missouri Pacific system) will, it is reported, lay new rails and reballast the Memphis division, besides filling in some trestles and reducing grades and curves. E. F. Mitchell is engineer of construction at St. Louis.

Sumter, S. C.—The John H. Sizer Lumber Co. of Sumter has, it is reported, bought timber lands in Horry county, and is building a standard-gauge railroad to reach them. Fred H. Sterner is president; John H. Sizer, secretary and treasurer.

Timpson, Texas.—T. S. Garrison of Timpson, a director of the company, is reported as saying that the Texas & Gulf Railroad has been extended south from Timpson for about 20 miles, and will be extended 30 miles further to Brownson to connect with the Santa Fe. It will be later extended to the Gulf at Sabine Pass. Northward it will go to Longview, Texas.

Tishomingo, I. T.—Mr. W. T. Crosby, manager, writes the Manufacturers' Record that the Southwestern Land, Power & Development Co. is being formed to build a double-track interurban railway paralleling the Washita and Red river valleys.

Vinita, I. T.—The Vinita & Western Railway Co. has awarded the general contract for the construction of approximately 50 miles of its line from Vinita, I. T., northwest, with probable terminus at Coffeyville, to the Osage Construction Co., with offices at Vinita, I. T. First 10 miles of grading has been let to Winter & Walt of Joplin, Mo., whose outfits have been at work for several weeks. The remaining 40 miles will be sublet within the next 30 days as a whole or in 5 or 10-mile sections.

Washington, D. C.—It is reported that W. J. Oliver of Knoxville has the contract for double-tracking the main line of the Southern Railway from Knoxville to Morristown, Tenn., 42 miles, and that work is soon to begin. W. H. Wells is engineer of construction at Washington.

Wilmington, N. C.—The Atlantic Coast Line is reported to have let contract to Phillips & Allport of Richmond, Va., to build new freight yards at South Rocky Mount, N. C. There will be 32 miles of tracking. E. B. Pleasants is chief engineer at Wilmington.

Wilmington, N. C.—The work of double-tracking the Atlantic Coast Line between Jacksonville and Callahan, Fla., 20 miles, is reported completed, and the work of extending the same 20 miles further to Folkston, Ala., is to begin soon. E. B. Pleasants is chief engineer at Wilmington.

#### Street Railways.

Alexandria, La.—The Alexandria Street Railway has, it is reported, engaged G. W. Borde of New Orleans to superintend construction of its line.

Birmingham, Ala.—The Birmingham Railway, Light & Power Co. is reported to be seeking a franchise to build an electric railway from Bessemer to Jonesboro.

Hendersonville, N. C.—The new dummy line from Main street to Laurel Park, owned by W. A. Smith, is reported to have begun operations.

Hopkinsville, Ky.—Reported that the city council will sell on September 16 a franchise for street railway. Samuel Crawford of St. Louis and associates will, it is reported, bid for it.

Hopkinsville, Ky.—It is reported that a movement is on foot to build an electric street-car line in Hopkinsville.

Houston, Texas.—The Houston Electric Co. proposes to extend the Franklin-avenue line to the Harrisburg road.

Salisbury, N. C.—The Salisbury & Spencer Railway Co. writes the Manufacturers' Record that it is extending its line. Edward M. Drane is president; Dwight Smith, secretary and treasurer.

Wheeling, W. Va.—The Wheeling Traction Co. will, it is reported, double-track the Moundsville division from Benwood to McMechen, and the City Railway is surveying for an extension from Wheeling to Benwood.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED.

The Manufacturers' Record has received the following inquiries for machinery and supplies. This information is published in the Manufacturers' Record, and also in its Daily Bulletin, as a matter of news, of interest to buyers and sellers of machinery, contractors and others. The Manufacturers' Record invites from its readers, whether subscribers or not, information regarding machinery or supplies wanted. This is published without charge, and is of great value in bringing buyers and sellers into direct connection.

Agricultural Implement Manufacturers.—W. I. Brown, Yazoo City, Miss., wants to correspond with manufacturers relative to making a patent fertilizer distributor of tin or galvanized iron, cloth and wood, complete.

Boiler.—L. R. Knight, Fort White, Fla., wants a 40-horse-power locomotive boiler. (See "Engine and Boiler.")

Boiler.—J. R. Hawes, Atkinson, N. C., wants to purchase a new or second-hand 25-horse-power return tubular boiler. (See "Engine and Boiler.")

Boilers.—See "Engines and Boilers."

Boilers.—See "Water-works."

Boilers.—See "Mining and Milling Machinery."

Boilers.—Clinton Water-Works & Electric Light & Power Co., Clinton, Tenn., wants prices on two 60-horse-power boilers, stack, etc. (See "Engines and Boilers.")

Boiler Work.—Bids will be received until September 20 at the office of the purchasing agent for the Postoffice Department, Washington, D. C., for making changes in the 12 boiler furnaces in the Postoffice Department building and for furnishing the material necessary to adapt and equip the boilers for the use of anthracite coal. Detailed specifications will be furnished on application; W. S. Shallenberger, acting postmaster-general.

Bolt Machinery.—P. O. Box 336, Charlotte, N. C., wants to purchase second-hand bolt machinery in good condition. Give full particulars and lowest cash price.

Bottles.—Crown Bottling Works, Brenham, Texas, is in the market for bottles, crown finish, quarts and splits.

Brick Machinery.—Price-Hemby Company, R. F. D. No. 5, Monroe, N. C., wants prices on brick machinery.

Bridge Construction.—The Police Jury of Nachitoches Parish, Nachitoches, La., will receive bids until October 3 for the erection of a steel bridge across Cane river at Bermuda, La. Certified check for \$1000 must accompany each bid. Usual rights reserved.

Bridge Construction.—Bids will be received until September 21 at the office of the county clerk of Jackson county, Independence, Mo., for constructing one 90-foot steel approach to Indian creek bridge on Wormal road according to plans and specifications on file in county clerk's office. A cash deposit or certified check for \$100 must accompany each bid. The county clerk reserves usual rights; Oscar Koehler, road and bridge commissioner.

Building Material.—James T. Harris, Spartanburg, S. C., will be in the market for building material.

Building Materials.—T. A. Young, cashier, Bank of Watertown, Watertown, Tenn., wants to purchase some standard shutters for brick house, the opening between the bricks being 37 1/2 inches wide and 9 1/2 inches high on each side and 95 1/2 inches in center-segment top.

Building Materials.—Ashpole Drug Co., Ashpole, N. C., wants prices on building material, glass, steel ceiling, etc.

Canning Factory.—M. D. Miller, Box 594, Cleburne, Texas, wants to correspond with firms or individuals relative to building and equipping canning factory having a daily capacity of 15,000 cans.

Canvas Gloves.—See "Glove Manufacturers."

Cement.—Composite Tile Co., Carolina Trust Building, Raleigh, N. C., wants prices on Atlas Portland cement.

Coffee-roasting Machinery.—C. S. B. Works, Crystal Springs, Miss., wants addresses of manufacturers of machinery and equipment for coffee-roasting plant; daily capacity 500 pounds. Also wants prices on grinders.

Concrete Work.—Sealed bids marked "Proposals to Erect the Fulton Avenue Entrance to Druid Hill Park," addressed to the Board of Awards, will be received until September 20 at the city register's office, City Hall, Baltimore, Md. Certified check for \$200, drawn to the order of the mayor and city council of Baltimore, Md., must accompany each bid. Plans and specifications may be seen at office of Wynt & Nolting, architects, 2 East Lexington street, Baltimore, Md. Usual rights reserved; John S. Doyle, engineer of parks; E. Clay Timanus, president board of awards.

Cyaniding Machinery.—See "Mining and Milling Machinery."

Dredging.—Bids will be received until October 3 at the bureau of supplies and accounts, Navy Department, Washington, D. C., for dredging about 10,000 cubic yards of mud, sand, clay, etc., at the navy-yard, Norfolk, Va. Applications for proposals should refer to Schedule 119. Blank proposals will be furnished on application to the navy pay office, Norfolk, Va., or to the bureau; H. T. B. Harris, paymaster-general, U. S. N.

Drills.—See "Mining and Milling Machinery."

Electric-lighting System.—Sealed bids marked "Proposals for Constructing Addition to Electric Lighting System," addressed to Capt. A. W. Butt, quartermaster, U. S. A., will be received at the general depot of the quartermaster's department, Washington, D. C., until September 18 for constructing an addition to the electric-lighting system at the Signal Corps Post, Fort Myer, Va. Plans and specifications can be seen and information obtained on application to the office of the quartermaster-general, U. S. A., Washington, D. C. United States reserves usual rights.

Electric Light Plant.—Clinton Water-Works & Electric Light & Power Co., Clinton, Tenn., wants prices on 60-kilowatt 220-volt D. C. direct-connected belt-driven generators, engines, two 60-horse-power boilers, stack, etc.

Electric-light Plant.—Woodward Cotton Co., Woodward, O. T., wants bids on equipment for electric-light plant.

Electrical Apparatus.—Bureau of supplies and accounts, Navy Department, Washington, D. C., will open bids October 3 for furnishing and installing ready for use a complete storage-battery installation on board the United States steamship Adder at the navy-yard, Norfolk, Va. Applications for proposals should refer to Schedule 121. Blank proposals furnished on application to the navy pay office, Norfolk, Va., or to the bureau; H. T. B. Harris, paymaster-general, U. S. N.

Elevator.—C. P. Snuggs, Raleigh, N. C., wants a hand-power freight elevator.

Engine.—B. Johnson, 112 North 2d street, Temple, Texas, is in the market for one two-horse-power gasoline engine.

Engine.—Jacksonville Press Brick Co., Jacksonville, Texas, wants a six-horse-power gasoline engine.

Engine.—See "Printing Equipment."

Engine.—Crown Bottling Works, Brenham, Texas, is in the market for a four-horse-power gasoline engine.

Engine and Boiler.—L. R. Knight, Fort White, Fla., wants 30-horse-power engine and 40-horse-power locomotive boiler. (See "Saw-mill.")

Engine and Boiler.—J. R. Hawes, Atkinson, N. C., wants to purchase a 25-horse-power center-crank engine and a 25-horse-power return tubular boiler; either new or second-hand.

Engines and Boilers.—Clinton Water-Works & Electric Light & Power Co., Clinton, Tenn., wants prices on engines and two 60-horse-power boilers, stack, etc. (See "Electric Light Plant.")

Engines and Boilers.—Robert Holt & Co., Fort Gibson, I. T., wants prices on engines and boilers.

Feather Renovator.—See "Renovating Machinery."

Gas-piping and Fixtures.—Allen & Preston, Langley, Ky., will shortly be in the market for large quantities of one-inch gas pipe and gas fixtures.

Glove Manufacturers.—Henry Ahrendt, 605 West Lafayette avenue, Baltimore, Md., wants to correspond with manufacturers of cheap leather and canvas gloves for motor-men.

Heating Apparatus.—J. H. Ford, manager Ford's Hotel, 241 South Main street, Memphis, Tenn., wants prices on steam-heating apparatus.

Heating Apparatus, etc.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will receive bids until September 23 for installing complete boiler plant, heating and ventilating apparatus, etc., for the United States Customhouse at Baltimore, Md., in accordance with drawings and specifications, copies of which may be had on application at the discretion of the supervising architect; also at office of Hornblower & Marshall, architects, 1509 H street N. W., Washington, D. C. Certified check for \$125 must accompany all applications for drawings.

Heating Plant.—J. G. Kellum, secretary, Tallahassee, Fla., is receiving bids for a steam-heating plant for the D. and B. Institute, St. Augustine, Fla.; specifications at the institute; W. B. Hare, superintendent.

Heating Plant.—Board of Control of the Institute for Blind and Deaf, St. Augustine, Fla., will consider bids for the installation of heating plant; plans and specifications at N. P. Bryan's office, Jacksonville, Fla. Wm. B. Hare is principal.

Holting Equipment.—See "Mining and Milling Machinery."

Ice Machinery.—Starke Ice Co., Starke, Fla., will be in the market for ice-making machinery.

Ice Plant.—Burroughs & Collins Company, Conway, S. C., want information relative to the cost of installing small ice plant in town of about 1500 inhabitants.

Implement Machinery.—All-Purpose Harrow Co., Columbia, Tenn., is in the market for all material used in the construction of harrow recently patented, such as harrow teeth, frames, links, eyes and staples. Specifications will be furnished on application. (See "Machine Tools.")

Leather Gloves.—See "Glove Manufacturers."

Lumber.—Page & Taylor, Norfolk, Va., want prices on chestnut-oak bark delivered at Norfolk, Va.

Machine Tools.—All-Purpose Harrow Co., Columbia, Tenn., wants prices on punches, staple and eye machinery and shearing machinery. (See "Implement Machinery.")

Marine Hardware.—S. M. Martin, Melbourne, Fla., wants prices on marine hardware.

Mattress Machinery.—Hattiesburg Furniture & Manufacturing Co., W. T. Temple, manager, Hattiesburg, Miss., wants cuts, prices, etc., on machinery for making mattresses.

Mill Supplies.—S. M. Martin, Melbourne, Fla., wants prices on mill supplies.

Mill Supplies.—Robert Holt & Co., Fort Gibson, I. T., wants prices on mill supplies.

Mill Supplies.—B. Johnson, 112 North 2d street, Temple, Texas, is in the market for



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20 feet 13-16-inch shafting, four 13-16-inch post hangers, pulleys, etc.

**Miners' Supplies.**—Adair & Higginbotham, P. O. Box 24, West Point, Ga., want addresses of firms furnishing miners' supplies, such as loadstone, finding bulbs or needles for locating minerals.

**Mining and Milling Machinery.**—The Piedmont Mining & Metallurgical Corporation will be in the market for boilers, steam hoists, sinking pumps, power drills, cyaniding, chlorination and concentrating machinery, and possibly a pyretous smelter. Address E. W. Siegmann, 1136 Columbia avenue, Philadelphia, Pa.

**Mortar Mixers.**—Composite Tile Co., Carolina Trust Building, Raleigh, N. C., wants prices on mortar mixers and motive power for same.

**Oil-mill Machinery.**—Price-Hemby Company, R. F. D. No. 5, Monroe, N. C., wants information as to cost and equipment of cotton-seed-oil mill on small scale.

**Paper-box-factory Equipment.**—L. A. Menning, P. O. Box 85, Winston-Salem, N. C., wants addresses of firms handling paper-box machinery; also of firms handling material for making paper boxes.

**Paving.**—Board of Aldermen, Washington, N. C., will receive bids until September 11 for constructing 5000 square yards of vitrified brick paving, 2700 feet of stone curbing, catch basins and accessories. Specifications can be obtained by addressing James S. Hall, engineer, Washington, N. C.

**Paving.**—W. E. Thomas, clerk of council, Roanoke, Va., will receive bids until September 28 for constructing brick sidewalks on various streets. A certified check for the amount specified under each section must accompany bid; plans and specifications on file at the office of J. H. Wingate, city engineer. Usual rights reserved.

**Pencil-slat Machinery.**—C. S. Cary, Sparta, Ga., wants machinery for cutting pencil slats.

**Plumbing Supplies.**—J. D. Turner, Jr., Spray, N. C., wants competitive prices on bathroom and other sanitary fixtures.

**Plumbing Supplies.**—See "Gas-piping and Fixtures."

**Power Equipment.**—See "Mortar Mixers."

**Printing Equipment.**—G. J. Stoneman, Columbia, Va., wants prices and circulars of small printing outfits suitable for small paper or job office; hand-power or small gas engine.

**Pump.**—Clinton Water-Works & Electric Light & Power Co., Clinton, Tenn., wants prices on pressure pump, 8000 gallons per hour.

**Pumps.**—See "Water-works."

**Pumps.**—See "Mining and Milling Machinery."

**Railway Equipment.**—Fourche River Valley & Indian Territory Railway Co., F. H. Hartsorn, president, Fourche (P. O. Esau), Ark., will want flat cars, box cars and passenger cars.

**Railway Equipment.**—J. M. Macleary, Suffolk, Va., is in the market for 18 second-hand No. 2 standard-gauge logging cars (Russell car preferred); also five miles of 30-pound steel T relaying rails. Quote spot cash price f. o. b. Suffolk and earliest delivery.

**Renovating Machinery.**—Bridges Pillow Co., Greenville, S. C., wants addresses of manufacturers of renovating machinery; also prices on feather renovators.

**Road-building Material.**—Material will be purchased to the amount of about \$6000 for a macadam road on State line one mile from the city of Texarkana, Ark.; W. M. Paup, acting chairman building committee, Texarkana, Ark.

**Roofing.**—Price-Hemby Company, R. F. D. No. 5, Monroe, N. C., wants prices on roofing.

**Saw-mill.**—L. R. Knight, Fort White, Fla., wants a complete saw-mill plant and shingle mill, medium light 30-horse-power engine, 40-horse-power locomotive boiler and all necessary equipment.

**Scales.**—Rhode Island Company, Spray, N. C., wants second-hand platform scales, capacity 1500 to 2000 pounds; quote price with specifications.

**Scenery.**—See "Theater Equipment."

**Shingle Machinery.**—L. R. Knight, Fort White, Fla., wants machinery for shingle mill. (See "Saw-mill.")

**Shingle Machine.**—Frank Wright, Cave Springs, Ga., wants to buy a small new or second-hand shingle machine.

**Smelting Machinery.**—See "Mining and Milling Machinery."

**Soda Fountain.**—Ashpole Drug Co., Ashpole, N. C., wants fixtures for soda fountain. (See "Store Fixtures.")

**Steel Ceiling.**—See "Building Materials."

**Store Fixtures.**—Ashpole Drug Co., Ashpole, N. C., wants prices on fixtures for drug store, including soda fountain.

**Theater Equipment.**—James T. Harris, Spartanburg, S. C., will be in the market for scenery and furnishings for theater.

**Tiling.**—W. N. Bellamy, town clerk, Booneville, Miss., wants 10 and 12-inch tiling.

**Traveling Crane.**—D. T. Sutherland Machine Works and Foundry, Bainbridge, Ga., will want to buy a hand-power traveling crane.

**Vault Work.**—Bids will be received until October 3 at the bureau of supplies and accounts, Navy Department, Washington, D. C., for furnishing and setting up in place ready for use at the navy-yard, Norfolk, Va., two steel fireproof vaults with vestibules, doors and the necessary fittings. Applications for proposals should refer to Schedule 120. Blank proposals will be furnished on application to the navy pay office, Norfolk, Va., or to the bureau; H. T. B. Harris, paymaster-general, U. S. N.

**Veneering.**—Robt. Holt & Co., Fort Gibson, I. T., want prices on veneering for berry boxes, etc.

**Veneering Machine.**—L. Lee, Mt. Olive, N. C., wants address of manufacturers of heavy veneering machines for making potato barrels and cantaloupe crates.

**Water-works.**—The Board of Trustees of the Georgia State Sanitarium, Milledgeville, Ga., will receive bids until October 18 for the construction of water-works and filtration plant for the Georgia State Sanitarium, Milledgeville. Plans and specifications may be seen at the office of T. H. De Saussure, sanitarium engineer, Milledgeville, and will be sent after September 20 on receipt of \$10 from responsible parties. Certified check for 2 per cent. of amount of bid, payable to the executive committee of the trustees of the Georgia State Sanitarium, must accompany bid. Usual rights reserved.

**Water-works.**—Joseph T. Davison, quartermaster, Fort Screven, Ga., will receive bids until September 29 for enlarging pump-house, installing boilers and pumps; also for sinking two six-inch wells at Fort Screven. Information furnished on application. United States reserves usual rights.

**Well-drilling.**—See "Water-works."

**Woodware Machinery.**—C. S. Cary, Sparta, Ga., is in the market for machinery for making cedar water pails.

**Woodworking Machinery.**—See "Pencil-slat Machinery."

**Woodworking Machinery.**—B. Johnson, 112 North 3d street, Temple, Texas, wants one 8 or 10-inch wood lathe, one small planer, one small wood boring machine, one 20-inch wood band saw and one work bench.

## MEXICO.

**Electric Plant.**—Mexican-American Power Co. has been incorporated with capital stock of \$10,000,000 gold to develop water-power and build an electric plant for transmitting said power to mining, manufacturing and other industries. It is proposed to develop 90,000 horse-power eventually, but 10,000 horse-power will be the initial development. Contracts for machinery are said to have been awarded to the General Electric Co. of Schenectady, N. Y., and the Stanley-G. I. Electric Manufacturing Co. of Pittsfield, Mass. Eduardo Dillon of the City of Mexico has contract for building the first canal. The Mexican-American Power Co. has its main offices in Philadelphia, Pa., where much of its capital stock is held. Joel H. de Victor of that city is president. A. S. Harvey, offices in City of Mexico, is vice-president.

**Electric-power Plant.**—Luis E. Reyes, City of Mexico, has applied for concessions permitting him to utilize the waters of certain rivers in San Luis Potosi for the development of power to be transmitted by electricity.

**Irrigation Systems.**—Patricio Molino & Sons, City of Mexico, are petitioning for additional privileges entailing the construction of several irrigating systems, the erection of power dams and reservoirs, etc.

**Iron Mines.**—Kent E. Keller of St. Louis, Mo., has organized the Ell Mamey Iron Co. to develop iron deposits in the State of Colima. It is said that the ores run from 64 to 70 per cent. in iron. The company has been incorporated with capital stock of \$250,000 by Kent E. Keller of St. Louis, Thomas Bardon of Ashland, Wis.; John F. Killorin, A. M. Chisolm and John G. Williams of Duluth, Minn.

**Mining.**—Incorporated: The Sinaloa Mining Co., capital stock \$50,000, by M. O. Wright, T. S. Brockenbrow, J. B. Freed, H. B. Stevens and H. F. Kettler, all of El Paso, Texas.

**Mining.**—Incorporated: Los Grados Mines, Inc., capital stock \$500,000; incorporators, A. B. Adams, New York; Louis Squires, Plainfield, N. J.; Richard Krause, 49 Wall street, New York; David B. Melick, Morristown, N. J., and O. L. Kent, 317 Ovington avenue, Bay Ridge, N. Y.

**Mining Developments.**—George W. Thompson, Sanz Hotel, City of Mexico, will interest United States capitalists in the organization of a corporation with large capital to acquire and further develop mining properties which he and an associate have been working in various districts of the State of Oaxaca. The intention will be to install the latest modern machinery and take advantage of every possibility in the mines.

**Sugar Refinery.**—Mexican National Sugar Refining Co., conducting a 10,000-acre sugar plantation near Cameron, Vera Cruz, will build a sugar refinery with daily capacity of 1500 tons of cane. It is estimated the plant will cost \$300,000 gold. The company is capitalized at \$1,500,000 gold, and it has concessions for taking 7000 liters of water per second from the Atoyac river for the development of power, which will be transmitted by electricity. Contracts are said to have been awarded for all the refining equipment and some of the power machinery, and that construction work will begin soon.

**Zinc Works.**—W. W. Graham, City of Mexico, has petitioned for concession to establish plant for manufacturing a preparation of

chloride of zinc, the latter being used for treating railroad ties, telegraph poles, etc.

## Railways.

**Steam Railroad.**—It is reported that within 30 days the La Dicha Mining Co. will begin construction of its railroad from its new property in Guerrero to the port of Acapulco, on the south coast, 42 miles, surveys having been completed by George Mitchell, president of the company.

**Steam Railroad.**—It is reported that the Mexican Central Railroad has purchased the lines of the Mexican Construction Co., the most important being the 59-mile line from the port of Manzanillo, on the Pacific coast, to Colima, the capital of the State of Colima. L. Kingman is chief engineer of the Mexican Central at the City of Mexico.

**Street Railway.**—J. W. Conger, brother of United States Ambassador E. H. Conger of the City of Mexico, has, it is reported, obtained an option on the Chihuahua mule street-car system and electric-power plant, and proposes to float the property with American capitalists in the East, who will convert it into an electric system.

**Street Railway.**—It is reported that the stockholders of the La Electra Company have authorized an issue of \$2,000,000 of mortgage bonds for financing the construction of an electric street-railway system in Guadalajara, State of Jalisco. The company also recently purchased the Kunhardt lines in Guadalajara.

## INDUSTRIAL NEWS OF INTEREST

### Iron, Kaolin, Manganese, etc.

Iron pyrites, kaolin, iron and manganese properties are wanted by Nathaniel S. Keny, 501 Provident Building, Philadelphia. He invites correspondence from owners who may desire to sell.

### A Good Contract.

It is announced that contract has been awarded to Messrs. Beemann & Scheffold of Louisville, Ky., for the construction of the new intake pump well and motor-house for the New Albany (Ind.) Water-Works Co.'s new pumping station.

### G. M. Basford Engaged.

G. M. Basford, for the past eight years editor of the American Engineer and Railroad Journal, has accepted a position with the American Locomotive Co. in charge of that company's newly-established publicity department. He will assume the duties on October 1 at the general offices, 111 Broadway, New York.

### Messrs. A. L. Register & Co.

It is announced that the firm of Pepper & Register, engineers and general contractors, established in 1889, has been dissolved and is succeeded by Messrs. A. L. Register & Co. This firm has arranged to conduct outstanding contracts and will continue the same business of engineering and general contracting. Its offices are at 112 North Broad street, Philadelphia, Pa.

### Messrs. Pepper & Bowle.

The firm of Messrs. Pepper & Bowle has been formed, with offices at 1233 Land Title & Trust Building, Philadelphia, Pa., to conduct a general engineering and contracting business. Electric railways, water-power plants, general contracts, reports and estimates, etc., will be given special attention. Messrs. David Pepper, Jr., and John R. Bowle compose this firm.

### Big Cement Contract.

A big cement contract was awarded several days ago in connection with the \$1,000,000 improvements of the Baltimore & Ohio Railroad at Wheeling. The contract calls for 50,000 barrels of cement to be used in the work, and it was awarded to Messrs. W. P. Burruss & Co. of 29th and Eoff streets, Wheeling, W. Va. This cement will come from the works of the Lawrence Cement Co. at Siegfried, Pa.

### Fabric Fire Hose Co.

The Fabric Fire Hose Co. of Duane and Church streets, New York, announces the appointment of C. H. Campbell as manager of its Southern branch at 431 Equitable Building, Atlanta, Ga. Mr. Campbell will be in a position to tender estimates, supply information and furnish orders promptly. It is well known that the Fabric Fire Hose Co. is the manufacturer of wax and Para-gum treated cotton rubber-lined fire hose and hose of every description, fire-department supplies, etc.

### Machinery Business for Sale.

In this column last week reference was

made to the fact that the machinery business of J. D. Mallory & Co. at 428 East Cross street, Baltimore, Md., will be offered for sale. The date mentioned was in error, and should have been September 18, not 8. The machinery on hand consists of a large stock of new and second-hand equipment that includes engines, boilers, pumps, saw-mill supplies, etc. Messrs. Pattison & Gahan, 7 East Lexington street, Baltimore, the auctioneers in charge, can furnish catalogues.

### For English Docks.

The London branch of the Buffalo (N. Y.) Forge Co. has procured a very interesting order for heating and ventilating the various buildings of His Majesty's dock-yards at Portsmouth. There are seven separate plants, each involving the same capacity of apparatus and of large size. The engineers of the Buffalo Forge Co.'s London office, in studying the requirements and existing conditions of the buildings, decided upon the use of fans especially designed therefor. The 56 heaters to be used in the installation are also of special construction.

### Southern Engine Plant Busy.

The South obtains a good proportion of the machinery used in its industries from plants established in that section. For instance, it may be noted that a large business is being conducted by the American Engine Co. of Auburn, Ala., in the construction of American-Ball engines and electric machinery. This company has so many orders on file that it is working its plant both day and night. Its recent important orders include one that calls for 1500 horse-power of the company's engines, direct connected to electric generators, for the Tennessee Coal, Iron & Railroad Co. of Birmingham, Ala.

### 250 Acres of Concrete Lining.

The concrete work on the west basin of the Jerome Park reservoir, New York, is nearly finished. The area of this basin is 93 acres, and it is being lined with concrete six inches thick, made by a battery of 18 Ransome concrete mixers. The mixers are mounted on trucks and are readily moved as the work progresses. The stone is delivered to the mixers in flat cars, and is shoveled from the cars into Ransome charging hoppers. This is probably the largest number of concrete mixers ever engaged in work at one time on a reservoir. The Ransome Concrete Machinery Co. of New York manufactures the mixers mentioned.

### A Good Quarry Investment.

Investors on the lookout for profitable purchases are advised to investigate the announcement that the stone quarry of the late John Harris at Baltimore is to be offered at public auction on September 20. This property has been operated for years. It includes over 10 acres of land located on the Falls road, which is being quarried under lease by the Isaac H. Peddicord & Sons Quarry & Transfer Co. on an annual payment of \$2500, payable monthly. Messrs. Pattison & Gahan, 7 East Lexington street, Baltimore, Md., are the auctioneers in charge. Thomas Ireland Elliott, 16 West

Lexington street, Baltimore, is one of the trustees in charge of this sale, and can give information.

#### Taylor-Newbold Saw Prices.

Buyers of saws will be interested in the announcement of the Tabor Manufacturing Co. of Philadelphia as to a reduction in the price of Taylor-Newbold saws. This change went into effect August 1, and is caused by improved facilities in manufacturing which enables the company to produce at a lesser cost. On new orders the company will furnish six extra teeth with every saw. The price of large teeth has been slightly increased as found necessary to pay for the air-hardening steel, the waste in forging and machinery and the cost of properly treating. The price of teeth up to five-eighths inch remains unchanged. Taylor-Newbold saws, when properly mounted, are highly efficient, as many users well know.

#### Saving in Oil Bills.

The saving in the oil bill which is effected by the use of Albany Grease is one which appeals to users of machinery everywhere. Messrs. Adam Cook's Sons, 313 West street, New York city, the only makers of this celebrated lubricating compound, recently received a letter from W. R. Funk, Kingstree, S. C., in which he states the results from a test of Albany Grease. The letter is of interest to every engineer. It says: "The sample cup, with sample of Albany Grease, was received, and has given entire satisfaction. I used it on the lock-thrust gearing of an Angor brick machine, which I have been running for four years and have never been able to keep cool until I commenced the use of your Albany Grease. I am now using Albany Grease on all my machinery, with a saving of 50 per cent. in cost over oil." Geo. H. Carey, purchasing agent for the Wm. Crump & Sons Ship & Engine Building Co., Philadelphia, states on behalf of his company that they have been using Albany Grease for some time past and are well acquainted with its merits. Messrs. Adam Cook's Sons are constantly receiving letters of this tenor from prominent users of their widely-known compound.

#### The Outlook in Tennessee.

The general outlook for the supply business in middle Tennessee is very promising. There has been a steady increase in sales for several months. The business of the Southern Mill, Mine & Railway Supply Co. of Nashville is confined almost exclusively to light machinery and supplies for manufacturing plants of every description, phosphate mines, coal mines, iron mines and railroad-construction work. It is being demonstrated very satisfactorily daily by the company that there is a growing demand for quality as well as quantity. There are several lines of accounts that the company handles that have increased much greater than others, among these being the products of the New York Belting & Packing Co. of New York city, Henry Disston & Sons of Philadelphia and Philip Carey Manufacturing Co. of Lockland, Ohio. The Southern Company has had to more than double its stock of rubber goods and saws, and has just closed a contract for 5000 additional squares of Carey's roofing for its immediate territory. The Southern Mill, Mine & Railway Supply Co. claims to be the largest exclusive supply and machinery house in its territory, and naturally keeps in closer touch with the manufacturing and mining industries. It sees no reason why there should be any cessation of buying in its lines before the middle of winter.

#### An Industry Progressing.

The Green Fuel Economizer Co. of Matteawan, N. Y., has just completed the erection of a large shop designed to provide for its rapidly-increasing business. This company not only supplies special exhausters with bearings removed from the action of the flue gases for mechanical draft in connection with the widely-used Green Fuel Economizer, but also builds fans, blowers and exhausters for every purpose, having, for instance, recently sold fans for heating, ventilating and humidifying in textile mills, ventilating and drying in paper mills, heating and ventilating in large buildings, etc. It is just now installing the largest mechanical-draft exhauster ever built for a factory in Massachusetts. New designs have been worked out for all types of "Green-Matteawan" fans, with the special object of reducing the power required for driving. Fans are often driven by small non-condensing engines or by electric motors, using purchased electric power, so this is quite an important matter. Fan builders, however, under the stress of competition and to increase profits, have frequently offered small, inefficient, high-speed fans where true economy for the purchaser would have indicated larger, slower-moving fans.

It should be remembered that the power consumed by a fan runs up very rapidly with the speed. The Green Fuel Economizer Co. does not contract for the engineering of plants or for the installation of heating and ventilating plants in competition with the heating and ventilating contractors, but freely offers the advantages of its engineering skill and 60 years' experience in the construction and operation of air-moving plants.

#### The Manila Electric Railway.

A step forward in the Americanizing of the Philippine Islands is the completion of the Manila Street Railway. The natives acquitted themselves creditably as laborers, their feast days and noontday siesta being honored by the superintendents in charge. The ties and poles used were made of Philippine molave, California redwood and an Australian wood; ties treated with creosote, molignum and carbolinum; rails painted with asphaltum and in low ground laid in concrete. The cars, mostly of the open class, were built of teakwood, combined with steel of a heavy design carefully protected with rustproof paint. Some cars are of convertible and semiconvertible type, to permit of protection to passengers during hurricanes. All cars are vestibuled and equipped with curtains of Pantastite. They are so built as to be readily kept clean and to shed the water which falls during storms. The railway has shops equipped to build cars. Its present equipment consists of 35 passenger cars with Westinghouse two-motor equipments throughout. Trucks were purchased in America. The power-house contains four Westinghouse turbo-generators which produce 4000 horsepower. Electricity for general power purposes and lighting is furnished, as well as for the railroad. The power-house, car barns and other buildings are built entirely of steel and concrete, all metal being painted to guard against deterioration. The entire plant was built and is being operated by J. G. White & Co. of New York. It is fully up to the most advanced standard of American practice, and it is a matter of no small importance that the Filipinos should have in their capital city such an object-lesson and training school in up-to-date mechanical engineering.

#### TRADE LITERATURE.

##### Again The Ridgepole.

Again the Ridgepole is making its rounds to tell people about modern roofing and to give them information as to the merits of some particular makes of roofing materials. The Ridgepole is a unique publication which Messrs. J. A. & W. Bird & Co. of Boston send out gratis in the effort to educate users, dealers, architects, contractors, building owners and others who should be interested in the best modern roofings. Rex Flintkote Roofing is given especial attention.

##### Modern Grate Bars.

With grate bars, like other articles, there are made different grades of the same kind, and if the bars happen to be of inferior workmanship and material do not blame the design. Bars to be of lasting qualities should be made of the best materials. Bars of this character are the kind which the Columbus Iron Works Co. of Columbus, Ga., manufactures. They have stood the test for over a quarter of a century, and are illustrated on a leaflet for the Columbus file recently issued by the company. Standard grates for vertical boilers, standard oblique grates for vertical boilers, and whatever else is needed in this line can be obtained from the Columbus Company. Write for the leaflet for your file.

##### The Ball Engine Catalogue.

Having recently introduced entirely new designs of side-crank automatic and Corliss engines, the Ball Engine Co. is issuing a catalogue regarding the machines. The publication is of the high-grade character one would naturally expect from the Ball engine people. Its letter-press and illustrations of the engines are exceptionally concise and clear and at the same time fully descriptive of the subject. The company is confident its new designs are superior to anything of the same kind now on the market, and invites the most exacting and critical examination of its automatic cut-off engines. Its catalogue refers at some length to the extensive manufacturing plant where the engines are built, and which has been enlarged and improved from time to time as required by the constantly-increasing demand for Ball engines and by the necessities which the owners are steadily foreseeing. In the present Ball catalogue a considerable larger range of sizes is covered than was covered in the previous Ball catalogue. In this new line, both horizontal and vertical, has been adopted the side-crank type because of its superior advantages to usual conditions of service.

Buyers of power machinery and others who are interested in having a detailed account of the new Ball engines are invited to write for the catalogue. Address the Ball Engine Co. at Erie, Pa.

##### Small Springs—All Kinds.

Small springs of every description are the specialty of the Wallace Barnes Company. They are manufactured in a multitude of shapes and sizes to meet the demands of various manufacturers and other users. Springs for motors, springs for clocks, all kinds of spiral springs, high-grade springs for automobile engines, gun springs, and in fact springs of any size and shape and for any purpose are made by the Wallace Barnes Company. When the article desired is not in stock or in standard size there is no difficulty in arranging to have the design prepared and the spring made to suit. A catalogue, the letter-press of which is of the highest character and illustrates to good effect some of the numerous Barnes springs, is being issued by the company in an effort to call attention of new spring users to the product and to remind old buyers that their orders will receive prompt attention. Besides manufacturing small springs, the Wallace Barnes Company deals in wire and cold-rolled steel; offices and plant at Bristol, Conn.

##### Goulds Efficient Power Pumps.

Goulds pumps are well and favorably known all over the world. Since 1848 their superior features have appealed to the discriminating buyer of pumping machinery, and the user has always found his selection productive of the utmost efficiency and economy in actual practice. Large and small users can attest to Goulds superiorities. The Goulds Manufacturing Co. has its plant at Seneca Falls, N. Y., where it has been located for 57 years, during all of that period being engaged in the manufacture of pumps only. There are 800 men employed now, the works occupying over 360,000 square feet of floor space and producing over 1500 different kinds of pumps, from the small bucket pump to the large water-works pump with a 24-hour capacity of 5,000,000 gallons. In 1901 the company's power-pump business had assumed such proportions that the triplex power-pump works were built, and this plant was believed at the time to be amply large to handle the increase of business for a long time to come, but already two extensive additions have been made to the machine shop, which is now over 500 feet long. A new foundry, 360x144 feet, is under construction, and other large additions are planned to keep pace with the constantly-increasing demand for Goulds efficient triplex power pumps. The Goulds works has a central power station, generating electricity which drives the machines in various sections of the plant, which is equipped throughout with labor-saving tools, electric cranes, pneumatic hoists and tools. The Goulds Manufacturing Co. has just issued a large descriptive catalogue of its pumps. The book is a highly creditable specimen of the printer's art, and presents many illustrations and descriptions of the standard Goulds pumps, besides reference to the various classes and kinds not kept in stock. If you ever buy pumps, you cannot afford to omit having one of these catalogues. Ask the company to send you one.

##### Dodge Power-Transmission Engineering.

One of the most important phases of installation in connection with manufacturing plants, mines, mills and other industrial enterprises is the power-transmission equipment. This class of installation frequently requires the advice of the most expert engineers and always the best of mechanical equipments in order that the highest possible degree of satisfactory and economical service be obtained. Power-transmission machinery is one of the products of modern inventive genius and manufacturing skill that has been given the closest attention in order to perfect the apparatus called for by workers in the industrial world. This subject of power transmission is given expert attention in a cloth-bound book of more than 400 pages, each 9x6½ inches, which the Dodge Manufacturing Co. of Mishawaka, Ind., has recently issued. This company's reputation as a power-transmission engineer and manufacturer of the Dodge line of power-transmission machinery is established and highly regarded wherever modern power-transmission ways and means are recognized. Its book presents some timely data that will prove of interest to those who are likely to be in need of the services of power-transmission engineers or in the market for any of the various and numerous articles, such as pulleys, shafting, pillow blocks, friction clutches, hangers, roll carriers, manila rope and its necessary accompanying devices, etc., too numerous to

mention in detail. Many of these devices are specialties with the company and are well known to power users, some of the most important industries in the United States having adopted them and now having them in use. In the Dodge book these things are interestingly referred to, and the Dodge patent American system of rope transmission is fully explained. In fact, the book is a veritable compendium of facts about power transmission as followed today in the most progressive plants of the world. Users of power who want to improve their facilities, manufacturers who are to build new plants, buyers of power-transmission appliances, engineers and others who are desirous of being informed on this important question are invited to write the Dodge Manufacturing Co. and request a copy of the publication mentioned.

#### The Iron and Metal Trades.

The Iron Age in its weekly review says:

"The feature of the market during the past week has been the heavy buying of steel rails for 1906, notably on the part of the Western lines. It is estimated that the total sales foot up to fully 250,000 tons. Among the large orders are 70,000 tons for the Chicago & Northwestern, 55,000 tons for the St. Paul and 50,000 tons for the Chicago, Burlington & Quincy. In the South the Atlantic Coast Line has taken 15,000 tons, while the Tidewater Railway has ordered between 8000 and 10,000 tons and the Reading road 15,000 tons. It is understood that during the next two weeks the requirements of the Pennsylvania and the New York Central roads will be brought out. Further heavy equipment orders have been placed, the Pennsylvania leading with over 16,000 steel cars. Among the orders to be placed is a lot of 1000 steel cars for the Lake Shore & Eastern, controlled by the Steel Corporation.

"The activity in nearly all lines of finished material is evidenced by the fact that the orders booked by the Steel Corporation for August make that the record month. The pressure which caused the advance in the price of structural material from 1.60-cent base, Pittsburg, to 1.70 cents last week is expected to lead to a like advance in the price of plates at an early date. Angle bars have been put up to 1.50 cents, Pittsburg, and some makers of iron bars are holding out for higher figures. From Cleveland comes the news that contracts have been let for two additional ships, and it is reported that two ore vessels of exceptional size are to be given out at an early date.

"In the pipe trade the principal item of interest has been the placing of an order for 60 miles of 18-inch pipe by the Ohio Fuel Supply Co. A smaller order placed is for 15 miles of 10-inch pipe.

"In the pig-iron trade it is worthy of note that there has been some contracting for foreign iron. A tidewater steel plant has purchased a lot of English Bessemer, the exact quantity not being known, while a large maker of cast-iron pipe has bought a round lot of Middlesborough pig. In both these cases the iron is to be used to cover export orders for finished product. A serious effort was made to compete with foreign iron for domestic orders for low-phosphorus pig, but the business was taken by home furnaces. Sales aggregate about 15,000 tons of iron of this character at \$20.50 to \$20.75, about one-half going to a large New England wire plant and the balance to steel works in Eastern Pennsylvania.

"So far as Bessemer pig is concerned, it is quite evident that the Steel Corporation will probably need additional quantities of outside iron. There have just been ordered into blast the Niles, Columbus and Riverside furnaces, so that every stack belonging to the Steel Corporation is now on the active list with the exception of Zanesville. Of course, from time to time furnaces must blow out for repairs. Thus one Duquesne has just stopped and one Carrie is expected to blow out."



## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

## Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,  
Baltimore, Md., September 6.

A continuation of summer dullness has characterized the Baltimore stock market during the past week. Barring rumors of a contest for control of the United Railways & Electric Co., there were no features of interest. United stock and income bonds advanced and continued about steady.

In the trading United Railways common rose from 15 1/4 to 16 1/4; the trust certificates from 15 1/4 to 16 1/4; the income bonds from 64 1/4 to 65, and the trust certificates from 63 1/4 to 65; the 4s were steady at 93 to 92 1/2 ex-coupon. Seaboard new common changed hands at 25; the old preferred at 43; the new first preferred at 88, and the second at 55 1/4. Seaboard 4s sold from 90 to 90 3/4; the 10-year 5s at 105; the 3-year 5s at 100; Cotton Duck 5s at 83 to 83 1/2. G. B. S. was dealt in at 9 1/2; the incomes at 30 1/2, and the 1sts from 62 to 60.

Bank stocks sold as follows: Bank of Baltimore, 119; Drovers and Mechanics', 225. Mercantile Trust sold at 142, and American Bonding at 40.

Other securities were traded in as follows: Northern Central stock, 108; Georgia Southern & Florida first preferred, 100; do. 5s, 115 1/4; Atlantic Coast Line stock, 165 1/4 to 168; do. Consolidated 4s, 101 1/2; do. South Carolina 4s, 103 1/4 to 104; do. Connecticut 5s, certificates, 114 1/2 to 115 1/2; do. do. 4s, certificates, 5-20s, 94 1/2; Macon Railway & Light 5s, 99 1/2; Baltimore City 3 1/2s, 1930, 108 1/2 to 108; do. 1940, 110 1/4 to 110; Baltimore, Sparrows Point & Chesapeake 4 1/2s, 94 1/2; Norfolk Street Railway 5s, 111; Georgia, Carolina & Northern 5s, 112; Virginia Midland 5ths, 112 1/4 to 112; Baltimore Brick 5s, 85; American Caramel common, 75; Houston Oil, 4; City & Suburban 5s, 114; do. Washington 5s, 105 to 105 1/4; Georgia & Alabama 5s, 112 to 112 1/2; Columbia & Greenville 1sts, 116 1/4; Virginia Electric Railway & Development 5s, 99 1/4; Monongahela River Railroad & Coal 5s, 100 1/4; Norfolk & Carolina 5s, 119 1/2; Western Maryland 4s, 89; West Virginia Central 6s, 110 1/2; Richmond & Danville 6s, 116.

## SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended  
September 6, 1905.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte	100	100	100
Atlantic Coast Line	100	165 1/4	168 1/4
Atlantic Coast Line of Conn.	100	43 1/2	45 1/2
Georgia Southern & Florida	100	30	40
Georgia Sou. & Fla. 1st Pref.	100	98	101
Georgia Sou. & Fla. 2d Pref.	100	73 1/2	80
Seaboard Railway Common	100	23 1/2	25
Seaboard Railway Preferred	100	43	45 1/4
United Railways & Elec. Co.	50	16	16 1/4

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank	100	28	29
Commercial & Far. Nat. Bank	100	132 1/2	140
Com. & Far. Nat. Bank Cfs.	100	145	150
Drovers & Mech. Nat. Bank	100	210	210
Farmers & Mer. Nat. Bank	100	40	50
First National Bank	100	100	149
Mechanics' National Bank	100	160	160
National Bank of Baltimore	100	100	122
National Bank of Commerce	15	24	24
National Howard Bank	100	11 1/2	11 1/2
National Marine Bank	30	37	37
National Mechanics' Bank	100	25 1/2	27 1/2
National Union Bank of Md.	100	120	130
Old Town Bank	100	100	11 1/4
Third National Bank	100	130	130
Western National Bank	20	38	40

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding & Trust	50	39	41
Baltimore Trust & Guarantee	100	100	230
Fidelity Trust	100	170	170
International Trust	100	143	155
Union Trust	50	50	60

Miscellaneous Stocks.	Par.	Bid.	Asked.
Alabama Con. Coal & Iron	100	64	70
Ala. Con. Coal & Iron Pref.	100	92	94
Consolidated Gas	100	85 1/2	87
Consolidation Coal	100	81	81
Consolidated Cotton Duck	50	11 1/4	14

Consol. Cotton Duck Pref.	50	31	35
G. B. & S. Brewing Co.	100	74	80 1/4
Georgia's Creek Coal	100	74	80

Railroad Bonds.	Par.	Bid.	Asked.
Atlanta & Charlotte 1st 5s, 1907	100	106	106
Atlan. Coast Line 1st 5s, 1907	100	101 1/4	102
Atlantic Coast Line (Conn.) 5s	100	115 1/2	115 1/2
Atlantic Coast Line (Conn.) 4s	100	93 1/2	94 1/2
Atlan. Coast Line (S. C.) 4s, 1948	100	103	104 1/2
Carolina Central 4s, 1949	100	98 1/4	98 1/4
Central of Georgia 5s	100	114	114 1/2
Charleston & West. Car. 5s, 1946	100	113	113 1/2
Char. Col. & Aug. 1st 5s, 1910	100	117 1/2	117 1/2
Char. Col. & Aug. 2d 5s, 1910	100	110	110
Coal & Iron Railway 5s, 1920	100	106	106
Columbia & Greenville 1st 5s, 1916	100	117	117
Georgia & Alabama 5s, 1945	100	112	112 1/2
Georgia Pacific 1st 6s, 1922	100	123	123
Georgia South. & Fla. 1st 5s, 1945	100	115	115 1/2
Norfolk & Carolina 5s, 1939	100	119 1/2	119 1/2
Petersburg, Class B 6s, 1926	100	128	132
Potomac Valley 1st 5s, 1941	100	116	116
Richmond & Danville Gold 6s, 1915	100	116	116
Seaboard Air Line 4s, 1950	90	90 1/4	90 1/4
Seaboard Air Line 5s, 10-year, 1941	100	105	105
Seaboard Air Line 5s, 3-year	100	102 1/2	102 1/2
Seaboard & Roanoke 5s, 1926	100	102 1/2	102 1/2
Virginia Midland 4th 3-4-5s, 1921	100	110 1/2	111
Western Maryland new 4s, 1952	100	88 1/2	89 1/2
West Virginia Central 1st 6s, 1911	100	110	111 1/2
Wilmington & Wel. Gold 5s, 1935	100	118	118

Street Railway Bonds.	Par.	Bid.	Asked.
Baltimore City Passenger 4 1/2s	100	102 1/2	104 1/2
Baltimore Traction 1st 5s, 1929	100	117	117
Baltimore Traction Conv. 5s, 1906	100	101 1/4	101 1/4
Central Ry. Ext. 5s (Balto.), 1932	100	116 1/4	116 1/4
Charleston City Railway 5s, 1923	100	108	108
Charleston Co. Electric 5s, 1909	100	95 1/2	95 1/2
City & Suburban 5s (Balto.), 1922	100	113 1/2	113 1/2
City & Suburban 5s (Wash.), 1948	100	105	106
Lexington Railway 1st 5s, 1949	100	102 1/2	102 1/2
Macon Ry. & L. 1st 5s, 1953	100	99 1/2	100
Metropolitan 5s (Wash.), 1925	100	116 1/4	116 1/4
Newport News & Old Pt. 5s, 1938	100	92	92
Norfolk Railway & Light 5s	100	92 1/2	94 1/4
Richmond Traction 5s	100	106	106
United Railways 1st 4s, 1919	100	92 1/2	93
United Railways Inc. 4s, 1919	100	65 1/4	66 1/4

## SOUTHERN COTTON-MILL STOCKS

Quotations Furnished by Hugh Mac-  
Rae & Co., Wilmington, N. C., for  
Week Ending September 4.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	83	80
Aiken Mfg. Co. (S. C.)	84	89
Anderson Cotton Mills (S. C.)	106	106
Arkwright Mills (S. C.)	119	119
Augusta Factory (Ga.)	75	86
Avondale Mills (Ala.)	100	105
Belton Mills (S. C.)	104	107
Bibb Mfg. Co. (Ga.)	101	101
Brandon Mills (S. C.)	99	104
Buffalo Cotton Mills (S. C.) Pfd.	98	98
Cabarrus Cotton Mills (N. C.)	136 1/2	136 1/2
Chadwick Mfg. Co. (N. C.) Pfd.	102	102
Chickamauga Mfg. Co. (S. C.)	91	91
Clifton Mfg. Co. (S. C.)	103	103
Clinton Mfg. Co. (S. C.) Pfd.	101 1/2	101 1/2
Clinton Cotton Mills (S. C.)	146	146
Columbus Mfg. Co. (Ga.)	92	95
Courtenay Mfg. Co. (S. C.)	99 1/2	101
Dallas Mfg. Co. (Ala.)	82	85
Darlington Mfg. Co. (S. C.)	59	74
Eagle & Phenix Mills (Ga.)	112	116
Easley Cotton Mills (S. C.)	120	120
Enoree Mfg. Co. (S. C.)	82 1/2	91
Enoree Mfg. Co. (S. C.) Pfd.	99	102
Enterprise Mfg. Co. (Ga.)	76	76
Exposition Cotton Mills (Ga.)	176	176
Gaffney Mfg. Co. (S. C.)	63	68
Gainesville Cotton Mills (Ga.)	25	25
Granby Cot. Mills (S. C.) 1st Pfd.	50	66
Greenville Mfg. Co. (S. C.)	150	155
Greenwood Cotton Mills (S. C.)	99	100
Grendel Mills (S. C.)	103	106
Henrietta Mills (N. C.)	200	200
King Mfg. Co., John P. (S. C.)	93	100
Lancaster Cotton Mills (S. C.)	100	106
Lancaster Cot. Mills (S. C.) Pfd.	97	98
Langley Mfg. Co. (S. C.)	90	96
Laurens Cotton Mills (S. C.)	161	161
Limestone Mills (S. C.)	95	101
Lockhart Mills (S. C.)	89	94
Louise Mills (N. C.)	95	95
Louise Mills (N. C.) Pfd.	102	102
Marlboro Cotton Mills (S. C.)	71	71
Mayo Mills (N. C.)	205	205
Mills Mfg. Co. (S. C.)	98	98
Mills Mfg. Co. (S. C.) Pfd.	100	100
Monaghan Cotton Mills (S. C.)	100	103
Monaghan Cotton Mills (S. C.)	100	103
Newberry Cotton Mills (S. C.)	124	124
Norris Cotton Mills (S. C.)	99	103
Odell Mfg. Co. (N. C.)	97	97
Orangeburg Mfg. Co. (S. C.) Pfd.	79	87
Orr Cotton Mills (S. C.)	108	108
Pacolet Mfg. Co. (S. C.)	146	151
Pacolet Mfg. Co. (S. C.) Pfd.	100	106
Pelzer Mfg. Co. (S. C.)	171 1/2	171 1/2
Piedmont Mfg. Co. (S. C.)	174	176
Poe Mfg. Co., F. W. (S. C.)	125	120
Raleigh Cotton Mills (N. C.)	100	100
Richland Cot. Mills (S. C.) Pfd.	50	50
Roanoke Mills (N. C.)	130	130
Saxon Mills (S. C.)	100	102
Sibley Mfg. Co. (Ga.)	57	63
Southern Cotton Mills (N. C.)	81	81
Spartan Mills (S. C.)	132	141
Springstein Mills (S. C.)	90	100
Trion Mfg. Co. (Ga.)	131	140
Unadilla Mills (S. C.)	125	129
Union Cotton Mills (S. C.) Pfd.	95	95
Victor Mfg. Co. (S. C.)	113 1/2	113 1/2
Warren Mfg. Co. (S. C.)	99	101
Warren Mfg. Co. (S. C.) Pfd.	105	105
Washington Mills (Va.)	20	25
Washington Mills (Va.) Pfd.	93	96
Whitney Mfg. Co. (S. C.)	117	121
Wiscasset Mills (N. C.)	114	125
Woodruff Cotton Mills (S. C.)	100	102

## Bank Reports.

The First National Bank of Birmingham, Ala., reports August 25 loans and discounts, \$3,990,277; United States bonds and premiums, \$564,500; other stocks and

bonds, \$23,700; total cash, \$2,320,564; capital, \$500,000; surplus and profits, \$354,514; total deposits, \$5,601,032; total resources, \$6,955,547. The officers are W. P. G. Harding, president; J. H. Woodward, vice-president; J. H. Barr, vice-president and cashier; A. R. Forsyth, F. S. Foster and Thomas Bowron, assistant cashiers.

The First National Bank of Richmond, Va., reports August 25 loans and discounts, \$4,735,325; United States bonds at par, \$660,000; other stocks and bonds, \$26,000; cash and due from banks, \$1,104,112; capital, \$600,000; surplus fund, \$400,000; undivided profits, \$170,810; deposits, \$4,270,399; total resources, \$6,561,381. The officers are John B. Purcell, president; John M. Miller, Jr., vice-president and cashier; Chas. R. Burnett and J. C. Joplin, assistant cashiers.

The Commercial National Bank of Houston, Texas, reports August 25 loans and discounts, \$1,483,726; United States bonds, \$250,000; cash and sight exchange, \$2,363,153; capital, \$300,000; surplus, \$300,000; undivided profits, net, \$155,972; total deposits, \$3,441,644; total resources, \$4,407,367. The officers are W. E. Chew, president; Jas. A. Baker, Jr., and J. S. Rice, vice-presidents; F. B. Gray, cashier; Geo. L. Price and W. E. Hertford, assistant cashiers.

The Birmingham Trust & Savings Co. of Birmingham, Ala., reports August 25 loans and discounts, \$2,331,256; due from banks and bankers, \$699,859; cash in vault, \$546,006; capital, \$500,000; surplus, \$200,000; undivided profits, \$36,254; individual deposits, \$2,703,977; total assets, \$3,814,558. The officers are Arthur W. Smith, president; Tom O. Smith, vice-president; W. H. Manly, cashier; Benson Cain, assistant cashier, and Chapell Cory, secretary.

The First National Bank of Gastonia, N. C., reports August 25 loans and discounts, \$420,332; with reserve agents, other banks and cash on hand, \$139,713; capital, \$100,000; surplus, \$12,500; undivided profits, net, \$6974; deposits, \$477,632; total resources, \$700,792. The officers are L. L. Jenkins, president; R. R. Ray, vice-president; S. N. Boyce, cashier; M. T. Wilson, assistant cashier, and L. C. Pegram, teller.

## New Corporations.

The First State Bank of Ekron, Ky., has been organized with \$15,000 capital. R. S. Dowell is president, and W. M. Frymore, vice-president.

The Bank of Taloga has been incorporated at Taloga, O. T., with \$10,000 capital, by W. H. Abbing, J. H. Antrobus and Ira M. Wiley, all of Cleo.

It is reported that the Merchants and Planters' Bank of Henrietta, Texas, will establish a branch bank at Chico, Texas. Dr. A. B. Edwards is president.

The Carolina Savings & Trust Co. of Wilmington, N. C., has begun business in the Atlantic National Bank Building with J. Holmes Davis as cashier.

The Hood County State Bank at Granbury, Texas, capital \$50,000, will soon begin business with John J. Hiner as president and John E. Brown, cashier.

The First National Bank of Knox City, Texas, has been organized at Knox City with \$25,000 capital. J. L. Jones of Haskell is president, and W. G. Sherrod of Munday, cashier.

The Pauls Valley National Bank, capital \$25,000, has been authorized to begin business with T. A. Vaughan, president; J. F. Myers, vice-president, and A. R. Hickman, cashier.

The officers of the Colleton Banking Co., recently chartered at Walterboro, S. C., with \$15,000 capital, are J. F. Lucas, president; E. L. Lemacks, vice-president,

and R. L. Fraser, secretary and treasurer. The First National Bank of Stratford, Texas, has been approved; capital \$25,000. The organizers are T. J. Noland, Paul Gerdes, L. M. Price, T. M. McCrory and Fannie P. Anthony.

The Bank of Wrens at Wrens, Ga., capital \$25,000, has been granted a charter. The incorporators are L. R. Farmer, W. L. Phillips, W. J. Wren and others, all of Jefferson county, Georgia.

The Howard Trust Co. of Tarboro, N. C., has been granted a charter. The incorporators are George Howard, W. Stamps Howard, Robert M. Rawls and Mary R. Howard, all of Tarboro.

The Continental Insurance Co. of Little Rock, Ark., has filed its charter; capital \$250,000. The officers are J. T. W. Tillar, president; J. T. Beal, vice-president, and Herman Kahn, treasurer.

The Bank of D'Lo at D'Lo, Miss., is expected to begin business about November 1 with \$15,000 capital. The incorporators are W. D. Cook, A. P. Francis, J. A. Kennedy, E. G. Ross and W. R. May.

The People's Bank of Chester, S. C., capital \$30,000, is expected to begin business October 15 with the following officers: Dr. G. B. White, president; W. A. Corkill, cashier, and M. H. White, assistant cashier.

The First National Bank of Carthage, Tenn., capital \$25,000, has elected the following officers: President, J. W. Williams; cashier, Frank Stratton; first vice-president, A. Oliver; second vice-president, D. A. Duke.

The Davis National Bank of Cave City, Ky., has been approved; capital \$25,000. The organizers are S. B. Davis, E. C. Davis, H. Y. Davis, Arch B. Davis and H. Y. Davis, Jr. It is to succeed the Bank of H. Y. Davis & Co.

The People's Bank of Ridge Springs has been chartered at Ridge Springs, S. C., with \$15,000 capital. The officers are F. G. Ashbill, president; Benjamin Boatwright, vice-president, and W. H. Stuckey, secretary and treasurer.

The National Fire Insurance Co. of Little Rock, Ark., capital \$250,000, has filed its charter. The officers are E. G. Thompson, president; W. B. Plunkett, vice-president; L. B. Leigh, secretary; Sam W. Reyburn, treasurer.

The Morgan County National Bank, to succeed the Morgan County Bank, has been organized at Cannel City, Ky., with \$25,000 capital. The officers are M. L. Conley, president; Joe C. Stamper, vice-president; Luke Powell, cashier.

The American National Bank of Sparta, Tenn., to succeed the People's Bank, has been approved; capital \$50,000. The organizers are J. T. Anderson, Sparta, Tenn.; Frank Dibrell, H. H. Young, S. Hayden Young and J. A. Wilson.

The National Bank of London, Ky., which is a conversion of the Citizens' Bank of London, has been organized with \$25,000 capital and the following officers: D. C. Edwards, president; E. H. Hackney, vice-president; D. F. Brown, cashier.

The First National Bank of Ravia, I. T., capital \$25,000, has been approved. The organizers are Robert T. Wilkinson, Mt. Carmel, Wabash county, Illinois; W. A. McAllister, J. H. Anderson, Robert C. Wilkinson, C. D. Byrum and W. C. Hooser.

The First National Bank of Kingston, I. T., capital \$25,000, has been authorized to begin business with the following officers: A. B. Scarborough, president; J. H. Willis, vice-president; James R. McKinney, vice-president; Barlow Roberts, cashier.

The Elba Banking Co. is being organized at Elba, Ala., with \$50,000 capital. The incorporators are F. P. Rainer, J. E. Henderson, L. A. Boyd, Y. W. Rainer and J. S. Windham. It is understood that the

new bank will commence operations in a few days.

The Carolina Mutual Insurance Co. of Columbia, S. C., has been granted a charter. The directors are T. K. Elliott, E. H. Sparkman, F. M. Farr, J. W. Simpson, Willie Jones and Dr. W. M. Lester of Columbia. Mr. S. L. Miller is president and treasurer.

The Buckingham Bank of Buckingham, Va., capital \$25,000, has been granted a charter. The incorporators are J. H. Fitzgerald, president, Buckingham, Va.; J. D. Kidwell, vice-president, Parkersburg, W. Va.; A. K. Fawcett, cashier, Webster Springs, W. Va.

The Commercial Bank of Bluefield, W. Va., capital \$50,000, has been incorporated by W. J. Winesett, D. M. St. Clair, C. M. Scott, Nathan Sohn, L. A. Lawder, S. S. Cofer, Henry Rogdin, H. B. Shelton, H. C. Jordan, H. H. Hale, R. L. Shelton and G. N. Sperden, all of Bluefield.

The Charlotte Trust Co. at Charlotte, N. C., has organized, electing the following directors: Julian H. Little, president; C. M. Patterson, vice-president; L. R. Hagwood, cashier; W. H. Belk, J. M. Davis, W. M. Long, H. G. Link, John W. Zimmerman and T. C. Guthrie.

The German-American National Bank has begun business at New Orleans, La., with the following officers: W. R. Irby, president; W. P. Burke, T. H. McCarthy, A. Breton, S. E. Worms and George W. Clay, vice-presidents; W. W. Bouden, cashier; F. Dietze, Jr., assistant cashier.

The Seaboard Fire & Marine Insurance Co. of Galveston, Texas, reference to which was made in last week's issue, has been organized with \$300,000 capital. The officers are B. Adoue, president; H. Wilkins, vice-president; John Sealy, treasurer, and J. H. Langbehn, secretary.

The MANUFACTURERS' RECORD is informed by E. C. Epps, cashier of the Bank of Kingstree, S. C., that a new bank with \$35,000 capital has been organized at Kingstree, to be known as the Bank of Williamsburg. The incorporators are C. W. Stoll, T. A. Blakley, E. B. Rhodus and W. I. Nixsen.

The Bank of Heard County, to be located at Franklin, Ga., with \$35,000 capital, has been organized with the following officers: Fuller E. Callaway, president; F. S. Loftin, vice-president; directors, W. A. Ridley, A. J. Kitchens, J. M. Levens, J. R. M. Carter, B. H. Tompkins, J. W. Daniel and J. W. Ray.

The Bowman Loan & Trust Co. of Bowman, S. C., is reported to have been reorganized and the capital increased to \$20,000. The directors are Joseph A. Berry, president; L. J. Smith, vice-president; D. E. Connor, cashier; W. L. Bishop, O. D. Wethers, W. H. Patrick, O. P. Evans, I. D. Easterlin and J. L. Shuler.

The new bank being organized at Trenton, S. C., with \$25,000 capital, will begin business, it is reported, about October 15 with the following directors: B. F. Mauldin of Spartanburg, president; J. F. Bettis, vice-president; A. H. S. Day, cashier, and S. T. Hughes, A. S. J. Miller, W. W. Wise, J. M. Bettis and J. D. Mathis, directors.

The Carolina Savings & Trust Co. of Wilmington, N. C., capital \$25,000, has made application for a charter. The organizers are John S. Armstrong, president; Geo. R. French, R. R. Bellamy, I. Shrier, D. McEachern, C. W. Yates and James F. Post. The bank will be operated under the auspices of the Atlantic National Bank.

In a letter to the MANUFACTURERS' RECORD the report that the Southern National Bank of Wilmington, N. C., recently chartered, would begin business September 15 with Charles N. Evans, formerly cashier of the Merchants and Farm-

ers' National Bank of Charlotte, N. C., as cashier, has been confirmed. Willis C. Wilkinson has been elected cashier of the Merchants and Farmers' National to succeed Mr. Evans.

The Bank of Ybor City at Ybor City, Fla., capital \$50,000, has completed its organization by electing the following directors: President, John Trice; first vice-president, Ygnacio Haya; second vice-president, Adam Katz; cashier, Geo. E. Simpson; John Grimaldi, E. H. Steinberg, Frank Bentley, Max Caras, Maximo M. Diaz, A. J. Knight, O. G. Sexton, Senator Jas. E. Crane, W. I. Porter, cashier of the Bank of Pasco County, Dade City, and F. M. Simonton.

The United Surety Co. of Baltimore, Md., capital \$500,000, surplus \$250,000, has organized by electing the following officers: President, Olin Bryan; vice-president, Henry G. Penniman; treasurer, Walter A. Mason; secretary, Robert A. Dobbin, Jr.; assistant secretary, E. D. Livingston; directors, Messrs. Robert Garrett, Francis T. Homer, Walter A. Mason, Henry G. Penniman, E. J. Clark, Henry G. Shirley, J. F. Rolph, Samuel H. Tattersall, Olin Bryan, S. S. Janney, and W. R. Edison of St. Louis.

### New Securities.

Asheville, N. C.—The city is reported to be considering the issuing of \$60,000 of reservoir and \$40,000 of electric-light bonds.

Ashland, Ky.—The \$30,000 of 6 per cent. 10-year street-paving bonds have been purchased by L. N. Davis for \$30,050 and accrued interest.

Barboursville, Ky.—Knox county is to vote in November on the question of issuing \$30,000 of courthouse bonds.

Bartlesville, I. T.—Bids will be received by G. T. Overfield, city recorder, until noon September 6 for \$17,000 of 5 per cent. 20-year sewer bonds.

Baton Rouge, La.—At the recent special election it was voted to issue \$40,000 of Choctaw basin drainage district West Baton Rouge parish bonds.

Beaumont, Texas.—The Beaumont, Sour Lake & Western Railway has been authorized to issue \$20,000 of stock on its road.

Carrollton, Ga.—It is reported that Carroll county is considering the question of issuing road bonds.

Carthage, Mo.—Carthage school district has voted in favor of issuing \$30,000 of 4 per cent. 10-20-year school-furnishing bonds.

Dallas, N. C.—Bids are now being received for the \$300,000 of 4 per cent. 30-year Gaston county road improvement bonds. These bonds were advertised for sale August 17, but no satisfactory offers were received.

Devine, Texas.—The \$8000 of 5 per cent. Devine independent school district bonds recently approved and registered have been purchased by the Texas Bank & Trust Co. of Galveston at par and interest.

Elberton, Ga.—The \$20,000 of 4½ per cent. 20-year sewer bonds have been purchased by John W. Dickey of Augusta.

Eldorado, Texas.—The State Board of Education has purchased the \$9000 of 4 per cent. Schleicher county jail bonds.

Enterprise, Ala.—The city has voted to issue \$10,500 of 5 per cent. 20-year electric-plant bonds. It is reported the bonds have already been sold.

Huntington, W. Va.—An election is to be held in October to decide the question of issuing \$100,000 of sewer and paving bonds.

Jefferson City, Mo.—On September 19 an election is to be held to decide the question of issuing \$25,000 of street-improvement bonds.

Lancaster, Texas.—The \$15,000 of 4 per cent. 20-40-year Lancaster school district bonds are reported sold.

Madison, Ga.—Morgan county has voted to issue \$40,000 of 4½ per cent. courthouse bonds.

Medina, Texas.—The \$2000 of 5 per cent. Medina independent school district bonds have been purchased by the State Board of Education.

Monroe, Ga.—The Robinson-Humphrey Company of Atlanta has been awarded at 107.666 the \$45,000 of 5 per cent. electric-light and water bonds.

Mullins, S. C.—The \$10,000 of 6 per cent. 20-year bonds of Mullins school district No. 34 have been purchased by S. A. Kean of Chicago at 108.50.

Oklahoma City, O. T.—The \$45,000 of refunding bonds have been purchased by D. H. Rollins & Son of Boston and Chicago at a premium of \$2281.50.

Pawnee, O. T.—The Trust Company of Dallas at Dallas, Texas, has purchased the \$7500 of 6 per cent. 10-20-year electric-light-plant bonds.

Princess Anne, Md.—Bids will be received by the county commissioners until noon September 19 for \$30,000 of 4½ per cent. Somerset county courthouse bonds. Robert F. Maddox is treasurer.

Rutherfordton, N. C.—Bids will be received by the county commissioners, Solomon Gallert, county attorney, until noon October 9 for \$100,000 of Rutherford county refunding bonds.

Tahlequah, I. T.—The city has voted to issue \$17,500 of 5 per cent. 20-year schoolhouse bonds. Address Herbert C. Smith, clerk United States Court.

Troy, Mo.—The Noel-Young Bond & Stock Co. of St. Louis has purchased at 100.50 and interest the \$10,000 of 4½ per cent. electric-light-plant bonds.

San Antonio, Texas.—The proposition to issue \$50,000 of school bonds was defeated at the recent election.

St. Petersburg, Fla.—Bids will be received by John F. Ridlon, city clerk, until noon September 18 for \$35,000 of 6 per cent. 30-year gold bonds.

Tupelo, Miss.—It is reported that the \$15,000 of 5 per cent. refunding bonds have been sold.

Victoria, Texas.—On September 8 an election is to be held to decide the question of issuing \$10,000 of artesian-well bonds.

Willow City, Texas.—The State Board of Education has purchased at par and interest the \$1000 of 6 per cent. 15-20-year schoolhouse bonds recently registered.

At Booneville, Miss., bids will be received by W. N. Bellamy, town clerk, until noon September 15 for \$10,000 of 5 per cent. 20-year bonds. Further particulars will be found in the advertising columns.

At Gainesville, Fla., bids will be received by the educational bond trustees of Gainesville until 6 P. M. October 15 for the issue of \$50,000 of 5 per cent. 10-30-year school bonds. Chris Matheson is secretary. Further particulars will be found in the advertising columns.

### Financial Notes.

Kansas City, Mo., has redeemed \$100,000 of 4½ per cent. water bonds due 1915.

The First National Bank of Sparta, Tenn., has increased its capital from \$50,000 to \$100,000.

The Nashville Realty Co. of Nashville, Tenn., is to be converted, it is reported, into a trust company with \$250,000 capital.

The Interstate Trust Co. of Greenville, S. C., has increased its capital from \$100,000 to \$125,000. F. F. Capers is president.

It is reported that the People's Bank of Sparta, Tenn., is to be converted into a national institution and the capital increased from \$20,000 to \$50,000.

### TABLE OF CONTENTS.

EDITORIAL:	Page
Fever of Southern Prosperity Epidemic	146
Calling for Workers	146
Inspiration for Southern Workers	146
A Cotton Goods Commission	146
Harvie Jordan	146
Reciprocal Coal	146
Indicative of Prosperity	146
The Cotton Movement	146
Activity at Huntington	146
Easy to Laugh	146
Heart Throbs and Waffles	146
Poking Fun	146
Columbus, Miss.	146
Little Rock	146
In the Coal River Basin of West Virginia	146
Progress in Developing Yadkin Power	146
Tobacco at Danville	146
Males Not Menaced by Females in Industry	146
Irrigation of Public Lands	146
West Kentucky Coal	146
Into Kentucky Coal	146
Tennessee-Kentucky Oil Fields	146
Texas Iron Resources	146
Protection for Investors	146
Industries at Brenham	146
On Pushing American Trade	146
Developing the South	146
RAILROADS:	
Iron to the Sea	146
Western Maryland Work	146
Bought a Railroad	146
Oklahoma City to Sulphur	146
Fourche River Line	146
Baltimore & Southern	146
A Maryland Electric Railway	146
Mobile, Jackson & Kansas City	146
Stilwell's Orient Line	146
Pineville to Monett	146
Electric Railway and Power Plant	146
Augusta & Florida Built	146
Town Creek to Stuart's Knob	146
Big Freight Yard	146
Railroad Notes	146
The Labor of Negroes	146
FOREIGN LETTERS:	
For the Argentine Republic	146
Iron Pipes for Sweden	146
Metal Goods for Russia	146
Interested in Southern Products	146
Wants Dried Fruit	146
TEXTILES:	
Another Mill at Concord	146
Lowell Cotton Mills	146
National Hosiery Manufacturers	146
American Press Cloth Co.	146
The Globe Manufacturing Co.	146
The Rockwood Mills	146
Memphis Cotton Receipts	146
Soft-Yarn Mill Completed	146
To Rebuild Woolen Mills	146
Will Want Mill Equipment	146
Southern Soft-Yarn Spinners	146
Textile Notes	146
COTTONSEED:	
The Cotton-Oil Market	146
Planning Oil Refinery	146
Cotton Condition Estimate	146
MECHANICAL:	
American Dynamis in the Orient (Ill.)	146
Making Sand-Lime Bricks (Illus.)	146
The Harder Gas Furnace (Illus.)	146
Jeffrey Finger-Tray Elevator (Illus.)	146
The Goulds Mine Pump (Illus.)	146
Pressed Steel Elevator Buckets (Illus.)	146
MINING:	
Oklahoma Oil Fields	146
North Carolina Tale	146
Lead and Zinc Ore	146
Coal Industry Active	146
Blytheville Business Men	146
LUMBER:	
Crescenting Timber	146
Purchase of Lands	146
Nearly 21,000,000 Feet	146
Chestnut-Oak Bark Wanted	146
Purchasing Timber Tracts	146
Lumber Notes	146
Large Iron Industry Planned	146
CONSTRUCTION DEPARTMENT:	
Baltimore Building Notes	146
New Enterprises	146
Building Notes	146
Railroad Construction	146
Machinery Wanted	146
Mexico	146
Industrial News of Interest	146
Trade Literature	146
The Iron and Metal Trades	146
FINANCIAL NEWS:	
Review of the Baltimore Market	146
Securities at Baltimore	146
Southern Cotton-Mill Stocks	146
Bank Reports	146
New Corporations	146
New Securities	146
Financial Notes	146



